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Government of Bombay

POLITICAL AND SERVICES DEPARTMENT

SECOND FIVE-YEAR PLAN
(1956-57 to 1960-61)

BOMBAY STATE

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SECOND FIVE YEAR PLAN

BOMBAY STATE

(1956-1961)

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PART I--AN OUTLINE

CHAPTER I

INTRODUCTION

Planning is a continuous process of effective utilisation of resources, human and material, available to the community so as to obtain from them increased output of goods and services and to attain other social objectives like reduction in inequalities of income, wealth and opportunity. The primary objective of planning in India is to raise the standard of living of the people and to enlarge opportunities for a richer and more varied life. This involves a sustained and well directed effort spread over a long period. For a proper appreciation of the Second Five-Year Plan and the directions in which future development is indicated it is necessary, therefore, to have a brief idea of the state of economy at present and the lines on which development has steadily taken place so far.

The Bombay State constitutes an important part of Western India covering a total area of 1,11,434 square miles or roughly 7,13,89,000 acres with a total population of 35,956,160. As a result of the merger of 176 former princely States in Bombay in the years 1948 and 1949 the area of this State has been substantially enlarged and the State now ranks fourth in the country in area and population. The State is divided into 28 administrative districts with 302 talukas. According to the 1951 census, the average density of population per square mile in the Bombay State was 323. Many of the areas where the density of population is above the average are situated along the coast. Roughly 3/5th or 61·4 per cent. of the population of the State depends principally on agriculture for its livelihood and 13 to 14 per cent. on production other than cultivation, the rest being engaged in commerce, transport and other services.

PHYSICAL FEATURES

The physical setting of the Bombay State has been influenced by the crustal movements which have created the Deccan peninsula and the faulted coastline with residual hills and river basins. Broadly speaking the State can be divided geographically into three distinct parts, viz :—

(*i*) Gujerat,
(*ii*) The Deccan Plateau, and
(*iii*) The Konkan consisting of four coastal districts.

The average rainfall in Gujerat varies from 36 inches at Ahmedabad in the north to 45 inches at Broach and Surat in the south. The stress of famine is intense in the northern districts and the demand for and utility of artificial irrigation is very great. The two principal soils in Gujerat are the yellow sandy loam known as *gorat* which is found to a limited extent in the northern districts and the black cotton soil prevailing in Broach and Surat Districts. Rice can be grown in both these kinds of soils under favourable conditions, but the main dry crops are Cotton and Millet in black soil and Millet and Wheat in the *gorat* soil. In Broach where the soil is much heavier and more retentive of moisture than in Surat Cotton is the staple crop. The potentialities of providing facilities of flow irrigation in Gujerat for protection against drought are very great. There are five large rivers, viz., Banas, Sabarmati, Mahi, Narmada and Tapi with its tributary Girna traversing it. These rivers are all very deep, 30 feet and upwards below the natural surface and some of them are subject to voilent and enormous floods. Provision of irrigational facilties will, therefore, also serve as flood control work.

In the Deccan tract, excluding the Ghats, the average rainfall is much less than in Gujerat and there is much less danger of water logging. Owing to the natural fall of the tract the water can be easily drained. Moreover unlike Gujerat, the tract is not exposed to floods. Large tracts in the Deccan area suffer from chronic famine conditions. Black soil prevails in all the Deccan Districts particularly in the river valleys but it is comparatively less retentive of moisture. Khandesh is, therefore, the only District where cotton is extensively cultivated. In the Southern Districts of Karnatak region a rich loamy soil is found where rice is the main crop. The Deccan, like Gujerat, is traversed by a number of important rivers which carry great volume of water during the monsoons but are dry or nearly dry during the remaining part of the year. The fact that important rivers have their source in the districts on the Ghats provides a natural facility for storage works on the Deccan rivers for protection against famine.

The main rivers in this tract are the Godavari and its two tributaries, viz., Pravara and Mula, the Krishna with the tributaries Ghataprabha and Malaprabha flowing through Karnatak and finally the Bhima with its tributaries Nira, Mula and Ghod. The Krishna and the Bhima rivers meet in the Hyderabad State and form the big Krishna river flowing towards the East.

In addition to utilisation of the large rivers of Gujerat and the Deccan for irrigational purposes, there is a large potentiality of developing electrical power on the Mahi, Narmada, Tapi and the Krishna rivers. The Ukai and the Koyna Multi-purpose projects on the Tapi and Koyna, a tributary of the Krishna, have been included in the State Plan.

The Konkan tract consists of an intensely rugged strip of land lying between the Western Ghats and the Arabian Sea. Intersected by numerous creeks and tidal rivers with their tributary streams, the tract is mostly cut up by rough steep hills many of them forest clad, or cultivated with inferior hill millets or pasture growth. Over the few flats and valleys which exist and in terraces along the beds of the streams where the soil is coastal alluvium rice is cultivated with the aid of local rainfall which varies considerably but rarely or never fails totally. Valuable garden cultivation is carried out mainly in Thana and Kolaba Districts but there is very little scope in this tract for large scale artificial irrigation.

Of the gross area of 7,13,89,000 acres of the State, about 4,97,60,585 acres is cultivated and the rest is uncultivable or current fallows and forests. The State has to depend primarily on rainfall which is very irregular in this State. In contrast to the heavy rainfall of 250 inches a year in the Western Ghats, several areas notably in the Eastern parts of the State hardly get an average rainfall of 20 inches a year. Consequently the State has suffered from food deficits and the problem of providing larger irrigational facilities has to be constantly borne in mind. It is estimated that in 1949-50 only about 4 to 5 per cent. of the total cropped area of the State was irrigated by Government and private canals and by wells, tanks and other sources. When the popular Government assumed office in 1946 the main canals existing in the State were the Nira Right and Left Bank Canals, the Mutha canals, the Godavari canals, the Girna canals and the Pravara canals in Maharashtra, the weir and canals of Hathmati and Khari cut in Gujerat and the Gokak canals in Karnatak. Later, certain new schemes were taken up to expand irrigational facilities. Among these may be mentioned the Meshwa canal, the Gangapur Storage Dam, the Ghataprabha Valley Development Scheme, the Mahi Canal, Ranand Tank and the Kakrapara Weir and canal. Besides these, two projects undertaken by the former princely States were carried to completion, viz., the Kolchi weir in the ex-Ramdurg State merged in Bijapur District and the Radhanagari scheme of ex-Kolhapur State.

FORESTS

The forest area of Bombay State is not large being only 20,852 square miles or about 18 per cent. of the total land area. There is however a variety of industrial purposes for which forest produce can be utilised in the State. Of these mention may be made of manufacture of matches, plywood and bobbins from soft wood, tannin from Myrabollans, pulp and paper from bamboos etc. The forest policy of Government aims at proper management and provision of adequate timber and fuel, preservation and improvement of general physical conditions of the country, fixation of a minimum forest area and control over private forests and waste lands.

MINERALS

The mineral resources of the State are limited. Although a variety of minerals are recorded from time to time in different parts of the State very few of them fall within the possibilities of commercial exploitation. Among these, the most important are the lime stone deposits used in the manufacture of cement. The present annual lime stone production of this State is estimated at 0·8 million tons. Among the other minerals exploited on commercial basis mention may be made of manganese ore in Panch Mahals, bauxite in Kaira and iron ore in Dharwar District. Private enterprise has been attracted to exploit these minerals. As a result production of manganese in the State has increase almost 9 times during the last six years or so from 20,000 tons in 1949 to 1,80,000 in 1955. The Bombay State produces over 10 per cent. of the country's output of manganese or nearly 3·3 per cent of the world output. Manganese and bauxite ores are being used for the manufacture of ferro-manganese and alluminium respectively. With the rapid growth of cities and increased housing activity as also the constructional activities under the capital projects in the public sector the scope for utilisation of building materials has increased considerably. Clay deposits which can be put to commercial use for manufacture of bricks, tiles, drainage pipes as also for the potery industry, for making fillers for the textile industry and paper industry are found at several places in Mehsana, Sabarkantha, Panchmahals, Broach, Surat, Belgaum, North Kanara, Ratnagiri, Amreli, Kaira, Thana and Kolhapur Districts. There are at present a few factories in Bombay, Ahmedabad and Khanapur producing procelain and china ware ; but there is considerable scope for development of the Ceramic industry in view of the large resources of china clay, folspar, quartz, talc bauxite etc. Hundreds of quaries of vatiety of building stones are being operated in this State. These include trap rocks, laterite, sand stones and quartsites, granites etc. Laterites are commonly used in coastal and other districts like Satara, Kolhapur, Belgaum ; granites in Baroda, Banaskantha, Sabarkantha, Panchmahals, Belgaum and Dharwar Districts for building and massive masonries. These provide also the raw material required for metalling of roads and for manufacture of cement. There are at present 3 Cement factories in the State. One more unit has been licensed in the Baroda region recently.

INDUSTRIES

In the field of industrialisation, Bombay State has had an early start compared to many other parts of the country. Hitherto the accent of industrial development in India was on consumer goods while basic capital goods industries had lagged behind. Prior to the first world war, the only major industries which could be noted for development were the cotton textiles and the jute industries of which the former took deep roots primarily in Bombay State. With the gradual expansion of the industrial base thereafter assisted by the Government's policy of protection which provided the necessary impetus sugar, matches, glass, vanaspati, soap and several engineering industries recorded significant progress. The Second World War provided yet another fillip to industrial expansion notably in the sector of medium and small scale industries like light engineering, pharmaceuticals, cutlery etc. The post war period also saw the growth of certain new industries like rayon, automobiles, ball and roller bearings and textile machinery while existing industries like cement, sheet glass, caustic soda and sulphuric acid attracted new investments. The relatively advanced position of the Bombay State is made clear by the fact that the total factory labour force in the State accounts for 5 per cent. of the working population of the State as against the all India figure of 1·8 per cent. of the country's working population. Whereas Bombay State has 10 per cent. of the total population of India, the percentage of factory workers in the State to total factory workers in India is 31 per cent. Cotton Textile industry which is the premier industry of the State has now an installed capacity of 63·3 lakh spindles and production of yarn and cloth in the Bombay State accounts for 50 per cent. and 64 per cent. of the total yarn and cloth production of India respectively. Sugar production in the State is roughly 10 per cent. of the sugar production in the country. Of more recent growth is the petroleum refining industry. Out of the 3 oil refineries established in India two have been located in Bombay City—one set up by the Standard Vaccum Oil Company and the other by the Burmah Shell Company. Both the refineries have gone into production. Besides, a number of small industries have gone up in this State mainly as a result of liberalisation of the scale of Governmental assistance and through the financial assistance made available by the Bombay State Financial Corporation.

POWER SUPPLY

Linked with industrial development is the growth of Electrical power supply. Compared to the consumption of electrical energy by industries in the whole of the country, over 33 per cent. of the total electrical energy for industrial purposes is consumed in the Bombay State. In the last ten years lack of adequate electric power has been a great handicap towards establishment of new industries and expansion of existing ones. The shortage has been more acute in the Bombay-Poona area. The main additions to power supply through the Chola Power Station near Kalyan, Tata's thermal plant at Trombay and the various grid schemes and distribution schemes have increased the installed capacity from 3,63,321 Kwt. in 1946-47 to about 7,86,223 Kwt. The total units of electrical energy sold have increased from 1169 million Kwt. in 1946-47 to about 2208 million Kwt. But looking to the industrial potentialities of the State the need for emphasising power projects in the State's developmental programmes is clearly indicated.

TRANSPORT

The all-round expansion of economic activity has put considerable strain on the transport systems which were already inadequate and needed considerable strengthening. The Railways and shipping had a large backlog of replacements and maintenance carried forward from the War period. The road system in the Bombay State also falls far short of its requirements. Large areas of the ex-princely States which merged in the Bombay State were particularly backward in this respect. In 1946-47, the State had only 139 miles of cement concrete roads, 5,552 miles of asphalt roads and 6695 miles of metalled roads. About 600 miles of roads have now been cement concreted and 1140 miles of roads constructed or improved. Besides 30 bridges have been completed. The road transport system for passenger services has been nationalised in this State. The whole State has been covered by this Service which is now operated with 3,136 vehicles on 2,326 routes. The State Road Transport Corporation also operates 845 goods vehicles on a non-monopolistic basis.

CO-OPERATION AND VILLAGE PANCHAYATS

The Co-operative movement now covers about 35 per cent of the State's population as against only 20 percent population covered in 1946-47. The membership of co-operative societies has correspondingly increased from 12·96 lakhs in 1946–47 to 29·66 lakhs and the total working capital of the societies has risen from Rs. 45·03 crores in 1946-47 to Rs. 121·33 crores.

Another important institutional development is recorded by the growth of village panchayats and the increasing role played by them in assuming developmental functions. There were 1,400 village panchayats in the State in the year 1946-47. Towards the end of 1955-56 the number of panchayats is expected to have increased to 9860, recording an increase of over 600 per cent.

SOCIAL SERVICES

In the sphere of social services, the expenditure in the Bombay State has increased by over 250 per cent during the past ten years. The introduction of compulsory primary education in 1946-47 has brought about a 35 per cent increase in literacy standards. The system of grants to secondary and higher educational institutions, the introduction of a bias for basic vocational and technical education and the improvements of the money incomes of the people have led to an increase in the ratio of pupils attending educational institutions from 8 per cent of the State's population or 27·4 lakh pupils in 1946-47 to 12 percent. of the population of the State or about 48 lakhs of pupils in 1955-56. The number of Primary Schools rose from 21912 to 33213 or by 50 per cent. and the number of pupils in these schools increased from 18·74 lakhs to 39 lakhs, i.e., by nearly 107 per cent. Increased medical aid and improved health services brought about a spectacular decline in the death rate from 23·0 per thousand of pupulation in 1946-47 to 15·0 in 1954 and in infant mortality from 162 to 109. Plague has been compltely eradicated from the State and malaria control measures have been introduced throughout the State. The number of civil hospitals and dispensaries recorded an increase of 35·8 per cent. over the 1946-47 level.

CHAPTER II

A BRIEF REVIEW OF THE FIRST FIVE YEAR PLAN

Size and Nature of the Programme

The Programme of Development included in the First Five Year Plan of the Bombay State was estimated to cost Rs. 146·31 crores. Of the total expenditure of Rs. 829 crores which the States were required to incur, Bombay's share came to about 17 per cent. as against the percentage of its population and area of a little over 10 per cent.

The Bombay State Plan aimed primarily at the continuation and consolidation of several development schemes undertaken by the Government as a part of its Post-War Reconstruction and Development Programme. This programme had been prepared soon after the popular Ministry assumed office in April, 1946, and was framed in close conslutation with the District Rural Development Boards and after discussing it with social workers and officers at a number of District conferences convened for the purpose. Thus, when the Five Year Plan for the State was formulated in 1950-51 a number of schemes had already been started in the State and had yet to be completed. Some of the schemes had reached a stage where institutions had been established and had to be maintained and strengthened and their full benefits consolidated. On account of the merger of several States, some of which contained a large percentage of Backward Classes it was felt that before new schemes were formulated it would be best if the existing schemes were completed and their scope extended to the merged and backward areas. Accordingly entirely new schemes were not generally entertained at that stage.

Allocations and Priorities

The allocation of the State outlay on Major Heads of Development was as follows :—

Head of Development	Cost over Five Years 1951-56 (Rs. in lakhs)
(1) Agriculture	17,48·42
(2) Veterinary and Animal Husbandry...	1,66·86
(3) Dairying and Milk Supply	6,02·13
(4) Forests	83·82
(5) Cooperation	1,23·16
(6) Fisheries	15·98
(7) Rural Development	1,31·50
Total : Agriculture and Rural Development ...	28,71·87

Head of Development	Cost over Five years 1951-56 (Rs. in Lakhs)
(1) Irrigation Projects	22,57·00
(2) Power Projects	10,43·00
Total : Irrigation and Power Projects ...	33,00·00
(1) Cottage Industries	1,03·06
(2) Other Industries	2,50·58
Total : Industry	3,53·64
(1) Roads	11,63·62
(2) Road Transport	2,00·00
(3) Ports and Harbours	25·00
Total : Transport	13,88·62
(1) Education	46,31·95
(2) Medical	5,36·41
(3) Public Health	11,16·73
(4) Housing	77·16 (Exclusive of Central Loans.)
(5) Labour and Labour Welfare	11,41·36
(6) Amelioration of Backward Classes	2,13·57
Total : Social Services	67,17·18
Total Expenditure on Five Year Plan of Bombay State.	1,46,31·31

During the Plan period the State has generally adhered to this programme and found the necessary resources for financing it. The physical targets laid down under different heads have been also generally achieved. The main variations were due to the fact that under certain heads like Soil Conservation, Minor Irrigation and Road Construction it was necessary to proceed faster in view of the widespread scarcity conditions which prevailed in several parts of the State in the first two years of the Plan. It, therefore, became necessary to go slow in certain other directions.

The total expenditure incurred on schemes in the Plan in the different years is shown below :—

Year	Amount spent (Rs. in crores)
1951-52 (Actuals)	22·51
1952-53 (Actuals)	28·16
1953-54 (Actuals)	30·05
1954-55 (Actuals)	31·25
1955-56 (Revised Estimates)	35·24
Total ...	147·21

Thus, the total expenditure on schemes in the Plan is likely to have exceeded the amount originally proposed to be spent. During the Plan period a number of additional schemes were also undertaken at the instance of the Government of India mainly with financial assistance from the Centre. A portion of the expenditure estimated at over Rs. 7 crores had to be borne by the State Government. A list of these schemes is given in the statement below :—

Serial No.	Name of the Scheme	Five Year Cost (Rs. in lakhs)		
		Share of Central Government	Share of State Government	Total
1	2	3	4	5
1	Medium and Minor Irrigation Works undertaken from the Government of India loan.	6,41·00	1,17·00	7,58·00
2	Community Development Projects	1,71·00	99·10	2,70·10
3	National Extension Service	56·00	43·00	99·00
4	Local Development Works	89·00	16·00	1,05·00
5	Employment of additional primary teachers under the programme of the Ministry of Education.	1,55·00	41·00	1,96·00

Serial No.	Name of the Scheme	Five Year Cost (Rs. in lakhs)		
		Share of Central Government	Share of State Government	Total
1	2	3	4	5
6	Amelioration of Scheduled Tribes and Scheduled Areas under Article 275 of the Constitution.	50·00	37·00	87·00
7	Rehabilitation Housing Scheme	3,50·00	1,75·00	5,25·00
8	Industrial Housing Scheme and Low Income Group Housing.	4,84·00	......	4,84·00
9	Rehabilitation of Displaced Persons	4,40·80	2,15·00	6,55·80
10	Koyna Hydro-Electric-*cum*-Irrigation Project ...	2,70·00	......	2,70·00
11	Extension Training Centres at Arbhavi and Kolhapur.	2·70	3·80	6·50
12	Training-*cum*-Development Project	5·90	·60	6·50
13	Scheme for Eradication of Untouchability ...	12·00	......	12·00
14	Assistance to Handloom Industry	59·00	1·00	60·00
15	Development of Ports	4·00	......	4·00
16	Scheme for Co-operative Farming Societies. ...	3·00	......	3·00
17	Road Transport (Goods Service) ...	1,55·00	......	1,55·00
18	Expansion of Power facilities ...	65·00	......	65·00
19	Loans to Small-Scale and Cottage Industries ...	20·00	......	20·00
20	Assistance to Municipalities for Water Supply Works.	1,17·00	......	1,17·00
21	Investment in the shares of Sugar Factories ...	65·00	......	65·00
22	Vaitarna-*cum*-Tansa Scheme	4,50·00	......	4,50·00
	Total ...	36,65·40	7,48·50	44,13·90

In order to find the necessary resources for financing the State Plan and the additional schemes referred to above the State Government had to exercise strict control over the non-development expenditure and expenditure outside the Plan. No new scheme of any major importance which was not a part of the National Plan was undertaken.

Physical targets attained.

A brief idea of the principal achievements of the First Plan in terms of physical targets is given below.

Irrigation and Power.—An additional area of 3,61,300 acres has been brought under irrigation through major and minor irrigation works bringing the total irrigated area in the State to 14,11,804 acres. The installed capacity of electrical power in the State under the schemes included in the State Plan has increased by 90,488 kw. and the total connected load has increased by 1,45,000 kw. Over 130 additional towns and villages were electrified under the various schemes for rural electrification bringing the total number of towns and villages served by electricity to 271 at the end of the First Plan period.

Agricultural Production.—Production of rice increased by 28 per cent., wheat by 7·5 per cent., Jowar by 68 per cent. and Bajri by 91 per cent. The total annual production of foodgrains increased from 52,37,000 tons to 57,59,000 tons or by nearly 10 per cent. Similarly production of cotton increased from 7,87,000 bales to 12,76,000 bales or by 62·13 per cent.

Co-operation.—The number of co-operative societies of various types rose from 16,115 in June 1951 to 18,847 in June 1955, their membership increased from 23·44 lakhs to 29·67 lakhs, and the total working capital of the societies increased from Rs. 82·97 crores to Rs. 121·33 crores. The bulk of the societies comprises rural credit and multi-purpose societies. The number of primary industrial co-operative societies has increased from 1251 in June 1951 to 1478 in June 1955, i.e. by about 14 per cent. The membership rose from 1,10,553 to 1,45,707 or by 22 per cent. and the paid-up share capital rose from Rs. 47,14,961 to Rs. 55,11,043 or by 17 per cent.

Communications.—1,140 miles of roads were constructed or improved, 600 miles of roads were cement concreted and 30 bridges were completed.

The Passenger Transport services were extended to cover the entire State with a fleet of 3,136 vehicles operating on 2,126 routes.

Education.—Schooling facilities have been provided to almost all the villages in this State having a population of 400 to 999 according to the 1951 Census. The number of Primary Schools in the State increased from 28,554 in 1950-51 to 33,213 by the end of March 1955 and the number of pupils attending these schools rose from 34,36,429 to 38,30,000. By the end of the First Plan period it is estimated that the number of pupils attending primary schools will have been reached the target of 39 lakhs. 3,000 first grade schools' were converted into basic during the Plan period. Nine more Technical High Schools were opened bringing the total number of technical high schools in the State to 35. An additional Engineering College at Ahmedabad was established providing admissions for 75 students for the degree course and 100 students for the diploma course. The number of admissions at the Engineering College at Poona was increased from 100 to 150 and the R. C. Technical Institute at Ahmedabad and the V. J. T. Institute at Bombay were expanded so as to provide for diploma and degree courses in Textile Manufacture, Textile Chemistry and Electrical Engineering.

Health.—About 198 hospitals and dispensaries were added during the Plan period. The total number of beds in hospitals and dispensaries increased from 15,991 in 1950-51 to 16,469 by the end of the First Plan. 159 Primary Health Units were established.

Housing—By the end of the First Plan period 9,676 tenements were constructed and 3,886 tenements were under construction under the Industrial Housing Scheme. In addition 13,356 tenements were constructed by the several Co-operative Housing Societies with assistance from Government or from the Bombay Housing Finance Society.

Labour.—The Employees State Insurance Scheme was introduced in Bombay City and nearly 5 lakh industrial workers were brought under the purview of the Scheme.

Social Welfare.—25 Welfare Extension Projects for the benefit of women and children and physically handicapped persons were started in this State bringing under each project a group of 20-24 villages covering a population of about 20,000.

Spill over of the First Plan

There are some schemes which have been started during the First Plan period but require to be completed in the Second Plan period. They are :—

Schemes	Cost of completion provided in the Second Plan (Rs. in crores)
1. The Koyna Hydro-Electric Project	29
2. The Kakrapar Irrigation Project	10
3. The Mahi Right Bank Canal Project	
4. The Ghataptabha Left Bank Canal Project ...	
5. The Gangapur Dam Project	
6. The Ranand Tank	
7. The Kolchi Weir	
8. Certain Medium and Minor Irrigation* works started late as a part of the scarcity programme and as additional State schemes.	8·75
9. Tube wells	
10. Electric Grid Projects of the Bombay Electricity Board and Rural Electrification Schemes taken up as additional State Schemes	3·71
11. Public Health Projects (Government works) ...	1·24
12. Buildings of the Medical Colleges at Poona and Ahmedabad	0·50
Total ...	53·20

*Names of the projects are given in the detailed break up *vide* Annexure.

6

CHAPTER III

THE SECOND FIVE YEAR PLAN—ITS SALIENT FEATURES

OBJECTIVES

The principal objectives of the Second Five Year Plan of the country are as follows :—

(a) a sizeable increase in national income so as to raise the level of living in the country ;

(b) rapid industrialization with particular emphasis on the development of basic and heavy industries ;

(c) a large expansion of employment of opportunities ; and

(d) reduction of inequalities in the income and wealth and a more even distribution of economic power.

These objectives are interrelated and are to be attained within the meaning of a socialist pattern of society.

SIZE OF THE STATE PLAN

The Second Five Year Plan for the Bombay State has been prepared in consultation with the Planning Commission keeping these objectives in view. The total outlay by the State Government on the schemes included in the Second Plan is estimated at Rs. 266·25 crores. The figure represents costs to Government and is exclusive of the resources of local bodies, Corporations and Statutory boards. Nor does it include popular contribution which will be forthcoming for a number of development schemes. The extent of these resources and contributions has wherever possible, been indicated in the description of schemes and also taken into consideration in arriving at the physical targets to be achieved under various Heads of Development. The State outlay is, however, inclusive of the amounts expected to be received as Central grants and loans except for the following items which have been treated as Central Schemes. In respect of these only the share of expenditure which the State Government is called upon to bear has been shown. This has been done in order to avoid duplication as this expenditure is for the present being shown as a part of the Plans of Central Ministries.

Scheme	Approximate amount likely to be spent by the Centre (Rupees in crores)
(1) National and Express Highways, Central Road Fund Works and Centrally-aided road works in scheduled areas.	14·00
(2) Schemes for Rehabilitation of Displaced Persons* ...	2·18
(3) Government of India (Railways) contribution to share capital of Bombay State Road Transport Corporation for Passenger Transport Service.	1·95
(4) Local Development Works Programme	4·00
(5) Social Welfare Extension Projects	0·25
(6) Training schemes of the Ministry of Labour ...	0·54
(7) Social and Moral Hygiene	0·25
Total ...	23·17

*State share is nil for this item.

In addition to the above items financial assistance from the Reserve Bank estimated at Rs. 4 crores for participation in the share capital of Co-operative Institutions is also likely to be available. Schemes which are purely Central, e.g. those relating to development of Railways, Shipping, Major ports, Posts and Telegraphs facilities, Rehabilitation of Displaced Persons, will form part of the Central Plan and are not, therefore, treated as a part of the State Plan.

A broad comparison of the State's outlay with the outlays of other States would be interesting.

The National Plan is of the order of Rs. 4,800 crores of which Rs. 2,559 crores represent the Plan of the Centre and 2,241 crores the total of all the State Plans. The following table gives the outlays of the Part A States :—

Name of State	(Rs. in crores)
Andhra	118·97
Assam	57·94
Bihar	194·22
Bombay	266·25
Madhya Pradesh	123·70
Madras	173·06
Orissa	99·97
Punjab	126·34
Uttar Pradesh	253·10
West Bengal	153·67
Total ...	1,567·22

Considering the State Plans together the outlay of Bombay's Plan is 11·8 per cent. As in the case of the First Plan the outlay of Bombay's Plan is the highest among the State Plans.

FINANCING THE PLAN

In order to meet this expenditure the available State resources are estimated as follows :—

		(Rs. in crores).
I. Revenue Resources—		
(a) At existing rates of taxation		32·50
(b) Additional taxation		14·00*
(c) Share of additional central taxation		8·00
(d) Less provision for servicing of public loans ...	(—)	5·20
Total ...		49·30
II. Capital Receipts (Net)		42·00

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*(Rupees 17 crores minus Rs. 3·2 crores being proceeds of the Urban Immoveable Property Tax to be transferred to Local Bodies i. e. Rs. 13·80 crores or Rs. 14 crores in round).

	(Rs. in crores)
III. Additional Resources—	
(*i*) Loans from the Public	45·00
(*ii*) State's share of small savings	41·00
(*iii*) Sale of Securities	10·00
Total ...	96·00
Total I, II and III ...	187·30

The final position would thus be :—

(*a*) Revenue Receipts	49·30
(*b*) Capital Receipts	138·00
Total ...	187·30

There would thus be a gap of Rs. 78·95 crores in the resources for financing the State Plan. This amount has to be obtained from other sources especially from the Centre as assistance. In the detailed break up given in the following pages, an idea of the revenue and capital expenditure on each scheme together with the amount of Central assistance likely to be made available has been given on the basis of information available to the State Government. For Irrigation and Power Projects, it has been assumed that Central assistance to the extent required would be made available. The nature and order of Central assistance is, however, not definitely known in several other cases and has to be settled in consultation with the Planning Commission and the Ministries of the Government of India. In arriving at the surplus available to the State on the existing basis a forecast of receipts on revenue and capital account, and an estimate of the expenditure required for existing activities, developmental and non-developmental, were made, keeping in view the actual trends. These estimates were finally settled in consultation with the Planning Commission. The statement below gives a general idea of the important items under I and II above.

(A) Receipts on Revenue Account—		(Rs. in crores)
1. Share of Central Taxes		72·9
(*a*) Income Tax	59·0	
(*b*) Central Excise Duties	10·4	
(*c*) Estate Duty	3·5	
2. State Taxes		2,17·8
(*a*) Land Revenue	37·0	
(*b*) State Excise	4·0	
(*c*) Stamps and Registration ...	22·3	
(*d*) Tax on Motor Vehicles	14·6	
(*e*) Sales Tax on Motor Spirit	10·1	
(*f*) General Sales Tax	90·0	
(*g*) Tax on Urban Immoveable Property ...	8·0	
(*h*) Other taxes and duties	31·8	

	(Rs. in crores.)
3. Other Revenue	77·0
4. Statutory Grants from the Centre ...	2·0
5. Receipts from Transfer of Funds ...	1·1
Total ...	3,70·8
(B) Committed Expenditure on Revenue Account.—	
1. Non-Development expenditure ...	1,71·4
2. Development expenditure	97·9
3. Transfer to Funds	21·5
4. Grants to Local Bodies	57·5
Total ...	3,48·3
Deduct probable savings ...	— 10·0
Net Expenditure ...	3,38·3
(C) Balance available on Revenue Account ...	32·5

(D) Receipts and Disbursements on Capital Account...	Receipts	Disbursement.
(1) Receipts from the Centre	......	......
(2) Loans from the Public	......	......
(3) Loans and advances by the State Government (Net)	7·30	......
(4) Unfunded Debt (Net)	7·50	......
(5) Sinking Funds (Net) ...	......	......
(6) Accretions to Reserve Funds (Gross)	24·27	2·00
(7) Deposit Funds (Net)	5·00	......
(8) Commuted value of pensions	......	0·05
Total ...	44·07	2·05

It is necessary to indicate here the basis on which the commitments of the State in respect of expenditure likely to be incurred on existing activities in the Second Plan period have been calculated. Expenditure on the maintenance of all existing institutions, e.g. educational, medical and for Welfare of Backward Classes is treated as committed expenditure and only expenditure on new institutions and on provision of buildings, equipment and additional staff for existing institutions is considered as development expenditure and shown in the Second Plan. Similarly subsidies and grants-in-aid at existing levels for the maintenance of existing schools, Co-operative Societies, etc. are shown as part of the committed expenditure, and only additional subsidies and grants or grants to new bodies are treated as development expenditure. Loans of a developmental character whether medium or long term are treated as developmental. In the case of National Extension Service and Community Development Projects, though the expenditure to be incurred in the Second Plan period on these programmes is regarded as development expenditure, a provision of Rs. 2 crores has been treated as committed expenditure since that amount would be required for the maintenance of institutions started in these areas after the intensive development part of these programmes comes to a close.

In the case of activities which involve repetitive works, e.g. irrigation, power, roads, soil conservation, the entire expenditure required in the Second Plan period except for maintenance and repairs is treated as development expenditure. In the case of research activities, expenditure on existing staff sanctioned permanently or for long periods has been treated as committed and the rest developmental. In the case of social services, only expenditure on additional buildings, staff and equipment is treated as development expenditure. This distinction is important from the point of view of judging the significance of the financial provision made under different Heads. As we proceed with our development work a number of institutions are established. Some of these involve considerable recurring expenditure. The maintenance of these institutions later becomes a commitment on the part of the State. The total outlay on development has to be judged by reference to the proper maintenance of such institutions as well as the establishment of new institutions or undertaking of new schemes, e.g. in the case of primary education, recurring grants-in-aid have to be given to local bodies for the maintenance of existing schools. These will not be shown as a part of the Second Plan though the expenditure will continue to be incurred on educating a larger number of children.

STRUCTURE OF PLAN

The allocations of the State outlay on various heads of expenditure are given below :—

Head of Development	Cost over five years (Rs. in lakhs)	Percentage to Total
I. Agricultural Programmes—		
1. Agriculture—		
(a) Agricultural Production	386·81	
(b) Minor Irrigation	638·84	
(c) Land Development (other than soil conservation).	319·61	
Total : 1. Agriculture ...	1,342·76	5·05
2. Animal Husbandry—		
(a) Animal Husbandry	108·69	
(b) Dairying and Milk Supply	388·12	
Total : 2. Animal Husbandry ...	496·81	1·86
3. Forests—		
(a) Forests	218·81	
(b) Soil Conservation	331·03	
Total : 3. Forests ...	549·84	2·06

Head of Development	Cost over five years (Rs. in lakhs)	Percentage to total
4. Fisheries	73·03	0·03
5. Co-operation—		
(*a*) Warehousing and Marketing	297·37	
(*b*) Co-operation	393·25**	
Total : 5. Co-operation	690·52	2·59
6. Village Panchayats	407·90*	1·53
7. Miscellaneous	111·15	0·67
Total : I. Agricultural Programme	3,672·11	13·79
II. National Extension, Community Projects and Local Development Works.	2,440·00†	9·16
III. Irrigation and Power—		
1. Multi-purpose Projects	3,950·00	
2. Major and Medium Irrigation Projects	6,090·00*	
3. Power Projects	900·00	
4. Miscellaneous	50·00	
Total : III. Irrigation and Power	10,990·00	41·28
IV. Industry and Mining—		
1. Mineral Development	1·04	
2. Large and Medium Industries	96·02	
3. Industrial Estates and Township	85·95	
4. Village and Small Industries	670·37‡	
5. Miscellaneous	42·08	
Total : IV. Industry and Mining	895·46	3·40

**The provision under Co-operation does not include the share of Rs. 4 crores of the Reserve Bank of India for implementation of the Rural Credit Scheme.

*The provision for Village Panchayats and Major Irrigation is tentative and will be adjusted within the ceiling in further consultation with the Planning Commission.

†This provision does not include the Central grants for Local Development Works (Rs. 4 crores). The provision for Community Development Projects and National Extension Service is tentative and will be adjusted within the ceiling in further consultation with the Planning Commission.

‡The provision under Village and Small Industries does not include the amount of Rs. 2 crores representing assistance from the All India Khadi and Village Industries Board to the State Village Industries Board.

Head of Development	Cost over five years (Rs. in lakhs)	Percentage to total
V. Transport and Communications—		
1. Roads	1,680·00*	
2. Road Transport	375·00†	
3. Ports and Harbours	83·00	
Total : V. Transport and Communications ...	2,138·00	8·03
VI. Social Services—		
1. Education	1,174·22	4·41
2. Health	2,363·43	8·87
3. Housing	1,577·25	5·92
4. Welfare of Backward Classes	309·20	1·20
5. Social Welfare	100·00	0·39
6. Labour and Labour Welfare	109·31	0·40
Total : VI. Social Services ...	5,633·41	21·19
VII. Miscellaneous—		
1. Development of National and Regional Languages.	7·60	
2. Encouragement of Arts and Culture ...	4·80	
3. Publicity and Propaganda	37·50	
4. Statistics	6·00	5
5. Revision of District Gazetteers	3·44	
6. Miscellaneous Schemes of District Development Boards.	100·00	
7. Development schems of local bodies ...	681·75	
Total : VII. Miscellaneous ...	841·09	3·15
Grand Total ...	26,624·80	100·00

It will be seen that a substantial portion of the total outlay is proposed to be incurred on Major Irrigation, Power, Community Development and National Extension Service. The needs of the Bombay State in respect of irrigation are large and have been neglected in the past. Though some progress has been achieved in the First Plan period, looking to the potentialities of the State on the one hand and urgent necessity of increasing the acreage under irrigation, specially in several

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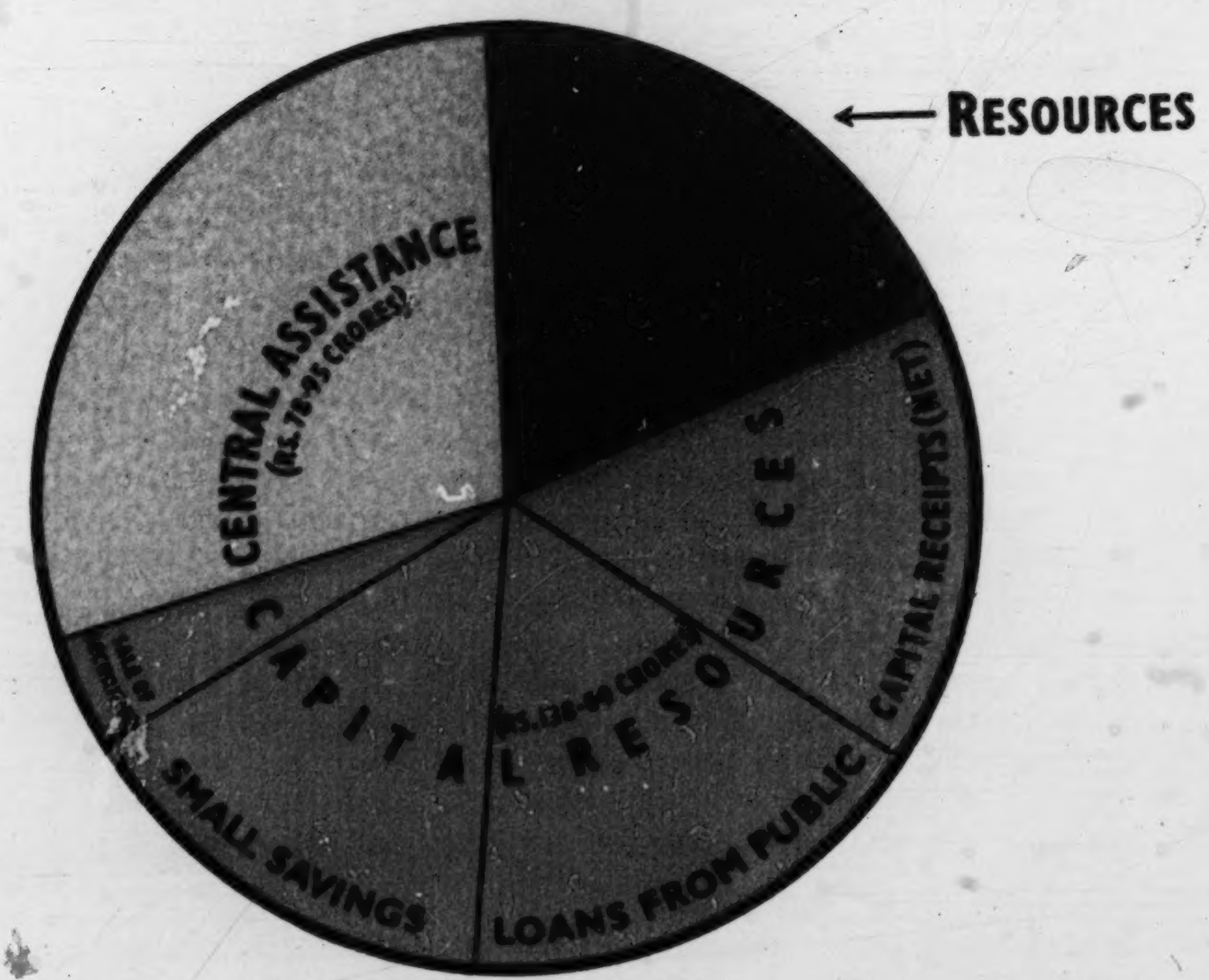
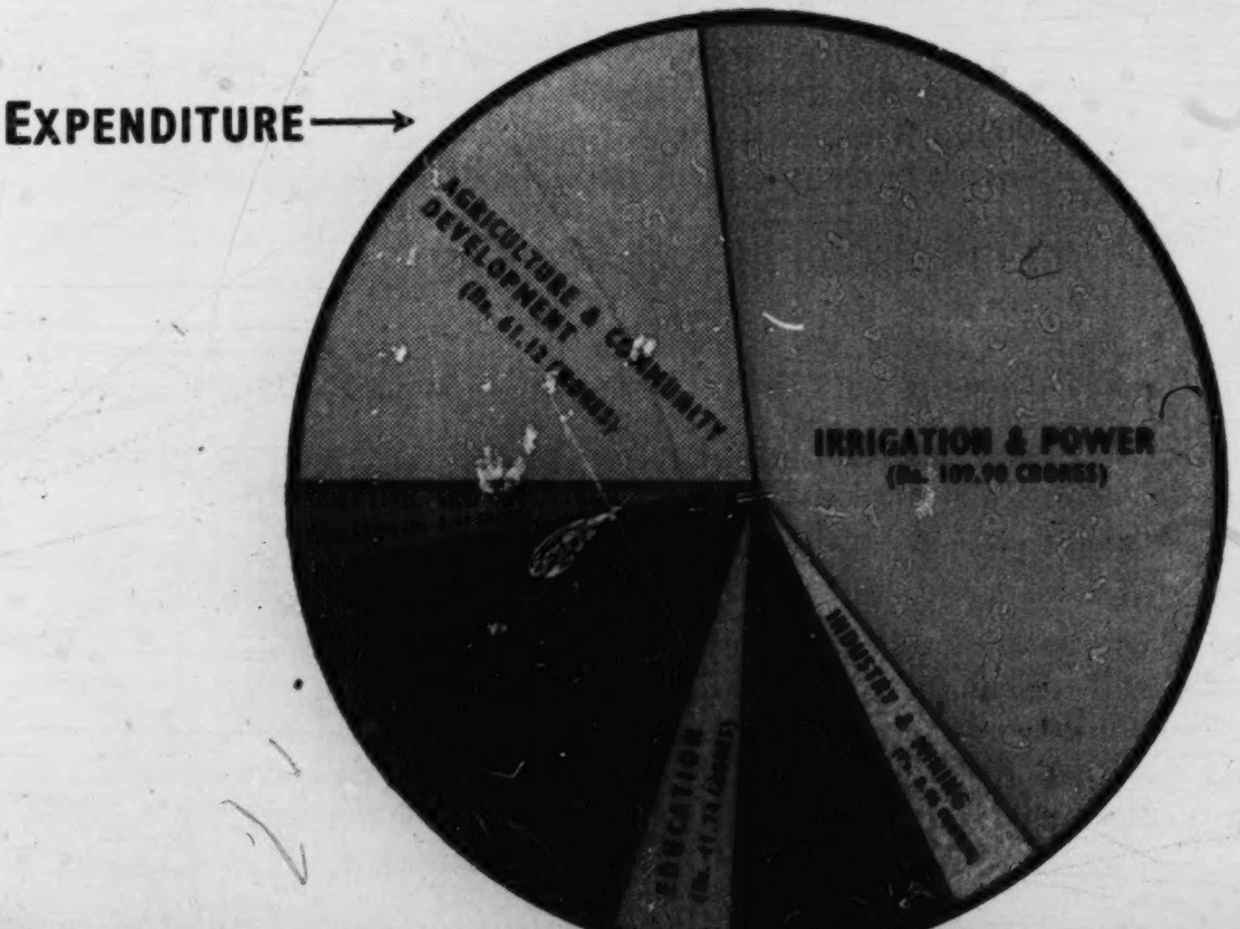
*The provision under Roads does not include provision for National Highways, Express Highways, Central Road Fund Works and Centrally aided Road Works in Scheduled Areas which will be shown in the Central Part of the Plan.

†The provision under Road Transport does not include the Railways contribution towards Nationalisation of Passenger Transport (Rs. 1·95 crores).

RESOURCES AND EXPENDITURE FOR THE SECOND FIVE YEAR PLAN BOMBAY STATE





scarcity affected areas on the other, it is absolutely essential for the State to undertake a large programme of major irrigation in the Second Five-Year Plan. Major Irrigation schemes will immediately lead to employment in rural areas and will assist substantially in increasing production and making for fuller employment in the long run. As the potentialities in the State are fairly widespread the increase in production and employment will also be distributed widely throughout the State. The State Government attaches the highest importance to this programme.

In view of the priority given to the establishment of heavy industries and the need for providing cheap power for the development of small-scale industries a substantial programme for power development including rural electrification has been included in the State Plan. Major part of the expenditure will be incurred on production of hydro-power which is particularly useful to industries.

The State has gone ahead with the programme of National Extension Service and Community Development Projects and proposes to cover the entire State by National Extension Service by the end of the Second Five-Year Plan period. About half of the area under the National Extension Service at any time will be covered by Community Development Blocks. It is necessary to make full provision for this scheme in the Plan as it provides for co-ordinated development on all frorts in rural areas. The other schemes relating to Rural Development have been so framed as to fit in with this policy. The State has adopted the general principle that programmes of intensification of particular activities in rural areas should be taken up in the National Extension Service and Community Development Project areas and, as far as possible, fitted in the pattern of development visualised in the National Extension Service and Community Development Projects.

A special effort has also been made to provide for a number of schemes relating to cottage and small-scale industries so as to conform to the policy laid down in the National Plan.

In the case of social services, the Directive Principles of the Constitution have been borne in mind and a steady advance has been visualised, priority being given to the correcting of certain glaring deficiencies in available facilities and to meeting the needs of rural areas and backward classes of population. A general account of the lines along which development is proposed under each major head of development and the details of individual schemes are given in the following pages.

TARGETS IN THE SECOND PLAN

The main targets under the Second Plan are given in Appendix A to this Chapter. A brief idea of the principal targets kept in view is given below :—

The entire State will be covered by the National Extension Service at the end of the Second Plan period and about 40 per cent. of the area already covered by the National Extension Service will be taken up for intensive development as Community Development Blocks.

The various major, medium and minor irrigation projects as also Tube wells will bring under irrigation an additional area of 14,26,200 acres. The State will thus have a total irrigated area of about 29,43,544 acres at the end of the Second Plan. In addition the new major and medium irrigation projects, the Ukai Multipurpose project and the new Tube wells proposed in the Second Plan will bring a further area of 39,69,100 acres after full development.

The power projects undertaken in the First Plan are expected to add 1,11,800 Kw to the existing load of 5,14,000 Kw. In addition the Koyna Hydro Project Stage I and the new power projects included in the Second Plan will provide a further installed capacity of 2,81,100 Kw on completion.

The various schemes included in the programmes for Irrigation and Agriculture are, however, expected to give an additional yield of 6,43,571 tons of foodgrains, 5,15,588 additional bales of cotton, and 12,25,970 additional tons of sugarcane. The targets of agricultural production are being revised keeping in view the need for stepping up agricultural production.

About 75 per cent. of the cultivating population in all the villages in the State will be brought under the Co-operative fold. 250 Grain Depots will be organised and 700 large and small sized godowns will be constructed and 100 major and minor markets will be regulated.

In addition to Cement concreting of 237 miles of roads, 1,110 miles of roads will be constructed or improved and 80 bridges will be completed.

About 7,59,300 additional children will be brought under compulsory primary education so as to reach a total figure of 48,59,300 pupils in primary schools. All full fledged primary schools will be remodelled on basic lines. The technical institutions in the State will turn out about 2,300 technicians during the Second Plan period.

Over 2,700 additional beds will be provided at the Civil and Cottage Hospitals and 187 additional Primary Health Units will be started. One College of Nursing will be started.

Under the several housing schemes 20,845 tenements and 6,000 houses will be constructed. In addition about 5,000 tenements will be constructed in rural areas under the Community Development Projects and National Extension Service Programmes. Besides this the programme of construction for the displaced persons will be continued and 8,842 additional tenements and 444 additional shops will be constructed.

PREPARATION OF THE PLAN

The schemes included in the Plan do not represent merely lump sum provisions but have been worked out to show the actual physical content of the programme in view. The programme consists of proposals which have been prepared and selected in the manner shown below :—

Proposals for inclusion in the Second Plan were invited early in 1954 from the public either direct or through local, co-operative and social bodies and were co-ordinated in each district by the District Development Board which includes besides officials, non-official representatives of the Local Boards and Members of the State Legislature and Parliament. The Collectors who are Chairmen of these Boards had been asked to give wide publicity to the manner in which suggestions should be sent. In this State there already exist various categories of local and social bodies such as the Village Panchayats, Municipalities, District Local Boards, Taluka Development Bodies and Co-operative and other societies, the services of which have been utilised for ascertaining the needs of the people. In the case of villages where there are no Panchayats the Collectors were asked to form *ad hoc* village bodies for the purpose of planning or to convene meetings of all villagers. The village officials and the social workers in villages have also been fully associated with the work of preparing village plans. The village proposals were considered by the District Development Boards which also took into account schemes wider in scope, *i.e.*, of interest to a number of villages or to the district as a whole. In order to prepare the District Plan, several District Development Boards appointed special Committees for the study of different aspects of the Plan and ultimately prepared a co-ordinated picture of the needs and resources of the district as a whole. The district representatives of the various Heads of Departments concerned with development activities were also associated with the District Development Board; there was, therefore, the closest co-ordination between the official and the non-official view points at the district level. Separate proposals were also invited from the Heads of Departments relating mainly to general schemes which involve considerations of policy at the State level or which by their very nature were such that they could be taken up only for the State as a whole or for certain regions not necessarily coterminus with the districts.

The various district plans and the proposals from the Heads of Departments were then co-ordinated at the State level as shown below :—

(*i*) Schemes included in the District Plans which were not technically feasible or which conflicted with the broad policies which the Government has in view were dropped.

(*ii*) Care was taken to see that there was no overlapping of activities, e.g. between what is proposed to be done in the National Extension Service and Community Development Projects as part of the regular programme of activities and proposals received either from the people through the District Development Boards or from Heads of Departments.

(*iii*) Proposals pertaining to Major Schemes including Irrigation and Power and provision of higher educational facilities were considered and co-ordinated at the State level.

(*iv*) Some minor proposals contained in the District Plans which required detailed scrutiny before they can be accepted are to be undertaken out of a lump sum provision which has been included in the Plan.

(*v*) Where a number of similar proposals were received from the districts they were consolidated into single schemes for the State as a whole so as to determine the overall allotment which is feasible within the resources available for the Second Five-Year Plan.

(*vi*) Schemes of local bodies were given separate consideration. The three Municipal Corporations of Bombay, Poona and Ahmedabad submitted their programmes direct to Government. The programmes of other Municipal bodies were included in the District Plans. On an overall scrutiny of these schemes, general schemes of assistance to Local Bodies have been framed and included in the State Plan. The concrete programme of Municipalities would be worked out as the Plan progresses.

(*vii*) The schemes received from the District Development Boards and Local Bodies and the Heads of Departments were scrutinised further from the point of view of administrative and technical feasibility and priority in terms of the objectives of the National Plan.

The Draft of the State Plan was then published in November 1955 and widely circulated to the Members of the Legislature, members of the District Development Boards, Local Bodies etc. The Draft State Plan was discussed by the State Legislature during its session in March 1956 and the views of the Members of the Legislature and the public were taken into account before the Plan was finalised. In this way, an attempt has been made to combine the advantages of planning from below with those of integration at the top so that the State Plan as now outlined represents the felt needs of the people as co-ordinated in the light of available finance, administrative feasibility and State policy. From a scrutiny of the list of schemes included in the State Plan it will be seen that the large bulk of them represents District Plans and Plans of Local Bodies.

The State Plan represents the proposals of the existing Bombay State. In view of the reorganisation of States, it is necessary to prepare a regional break-up indicating the programmes to be taken up in each of the reorganised States and to indicate to each district and other smaller planning units within the district the order of development under each scheme which is consistent with the Plan as a whole.

CO-ORDINATION OF SCHEMES

Co-ordination of Schemes within each Department or within related groups of Departments has also been carried out, e.g., all proposals of Agriculture, Co-operation or Education or other Departments concerned with rural development which are likely to be covered by the schemes of the National Extension Service and Community Development Project Areas have not been separately provided for in the Plan. Similarly schemes put up by the Medical and Public Health Departments have been scrutinised so as to avoid overlapping and to ensure economy and administrative efficiency. Several schemes have also been worked out with the express object of assisting the activities of other related Departments. Schemes of training have been given larger allotments and a higher priority in phasing so as to assist in the implementation of other programmes. The activities proposed to be taken up in the State have also been co-ordinated with the programmes proposed to be undertaken by the Central Government. Where the policies of the Central Government have been indicated, corresponding schemes have been prepared to implement such schemes at the State level.

ADMINISTRATIVE TASKS AND ORGANISATION

On 1st June 1953 there were in Bombay State nearly 1,70,000 Government employees, both Gazetted and non-Gazetted. Of these nearly 30 per cent. were, employed in the nation building activities such as Education, Medical, Public Health Agricultural Development and Public Works Administration. For the implementation of various schemes included in the Five-Year Plan separate staff is normally provided for under the schemes themselves. At the Secretariat level the respective Administrative Departments maintain administrative control of sanctions to expenditure, staff, scrutiny of details of schemes, etc. in consultation with the Finance Department. The developmental machinery in this State has gradually been strengthened from time to time and both in regard to administrative and technical cadres the State was able to meet the requirements of the expanding developmental activities. Difficulties were, however, felt in getting adequate number of Civil Engineers and Overseers for the Community Development Projects and Local Works Programmes and draftsmen and surveyors for preparation of Town Plans. It was also found difficult to get adequate number of qualified doctors for the Subsidised Medical Practitioners' Centres in rural areas.

During the First Plan period several steps were taken to increase the efficiency of administration. Periodical conferences of Collectors were held to discuss developmental and administrative problems with special reference to programmes for the districts and to bring home to them the primary need for avoidance of delays. In addition, at the State level, an Inspection and Organisation and Methods Section has been set up in charge of a Special Secretary to Government. A team of three Secretaries, including the Special Secretary, carries out periodical inspections in the districts and suggests ways and means for improvement of organisation and for co-ordinating the activities of the various departments in the districts and for generally facilitating the smooth working of administration. Considerable emphasis is now being laid on local initiative and participation in conducting developmental activities.

During the Second Plan period, it would be necessary to strengthen the cadres of the Indian Administrative Service so as to fill the gap existing and to meet the requirements of this State on account of development visualised under the Second Five Year Plan. The exact requirements of posts in the State Services like the Deputy Collectors and Mamlatdars are being worked out. These would also cover the requirements of Project Officers and Block Development Officers for the Community Development Projects and National Extension Service Programmes.

It is estimated that at the end of the First Plan period there was a shortage of about 660 Engineering Graduates and 260 diploma holders in engineering. Additional requirements on account of the schemes included in the Second Plan are estimated to rise gradually to 1,712 graduates and 3,500 diploma holders in the last year of the Second Five Year Plan. These include the requirements for Major, Medium and Minor Irrigation and Power Projects as also the constructional programmes to be taken up under the various schemes departmentally or through local bodies, co-operative societies, etc. The Engineering Colleges and Institutes in the State have provision for the admission of about 800 students to the degree classess and 900 to the diploma classes every year. On the assumption that about 50 per cent. of them will be passing out at the end of the course each year, it is estimated that in all about 2,000 degree holders and 2,250 diploma holders will be available. In order to strenghten the number of diploma holders, provision has been made in the Plan for 5 Polytechnics which will, to begin with, admit about 75 students per year. As the programme for their establishment will have to be phased, the total number of diploma holders estimated to be made available during the Second Plan period may not exceed 325.

In order to overcome the shortage of overseers, special short-term courses for those who have passed the Secondary School Certificate Examination have been started. It is expected that such trainees will be able to relieve the overseers of a good part of their routine work and thereby release them for more difficult type of work.

In the sphere of Agriculture and Community Development the requirements of the Second Plan are about 400 Agricultural Officers and 2,434 Gram Sevaks. The Agricultural Colleges in the State provide facilities for turning out over 200 Agricultural Graduates per year. Provision for training of 1,850 Gram Sevaks at the

Extension Training Centres has been made in the State Plan. Besides, there are 17 Agricultural schools in the State which are imparting training in the basic subjects of Agriculture, Revenue and Co-operation. The number of persons trained at these schools and the 4 additional schools which are proposed to be started in the Second Plan period may be about 2,500. The total requirement of stockmen for the various schemes relating to veterinary facilities, Artificial Insemination Centres etc., including Community Development Projects and National Extension Service Areas and eradication of rinderpest is about 900. There are already over 300 stockmen in the State. Nearly 150 more stockmen have been trained during the year 1955-56 and 500 more stockmen will be trained during the Second Plan period.

Over 79,000 persons including officers of the Co-operative Department will be trained in co-operation during the Second Plan period. Considering the fact that about 6,130 additional co-operative societies of all types would be organised during the Second Plan period, it is estimated that the requirements of the Second Plan would be fully met by these trainees.

There are at present 116 schools in the State imparting training in Cottage Industries. In the Second Five Year Plan 504 training centres would be added. It would be possible to expand this programme if additional funds are provided for undertaking more schemes for development of cottage and village industries as recommended by the Karve Committee.

In the sphere of education there is provision at present for training 5,500 primary teachers per year. The present number of trained teachers represents about 57 per cent. During the Second Plan period nearly 30,000 additional teachers would be trained bringing the total of trained teachers to 75 per cent. The conditions of service of secondary teachers have been considerably improved following the revision of pay scales and allowances, provision of provident fund and facilities for free education of their children in pursuance of the recommendations of the Secondary Schools Committee. Provision is made in the Plan for training of 560 additional secondary teachers.

The health programme of the State would require about 179 doctors, 430 nurses, 371 midwives, 109 compounders, 40 trained pharmacists, 79 sanitary inspectors and 97 health visitors. The Medical Colleges in the State have provision for admission of about 500 students each year. It is estimated that the number of candidates who pass out each year is about 40 per cent. of the number admitted each year. The facilities already provided and those proposed to be provided in the Second Plan for training in medical and public health would be adequate except in the cases of highly trained nurses and midwives. A beginning will, however, be made by training about 60 nurses at a College of Nursing to be started under the Second Plan. In order to encourage doctors to work in rural areas post-examination training in public health in these areas is proposed to be made compulsory for M. B. B. S. students. An Institute for Training of Pharmacists is also proposed to be set up which will train about 40 candidates annually.

It will thus be seen that on the whole the State Plan makes adequate provision for training of personnel required for the implementation of the Plan. The need for diversification of education and training courses has also been kept in view. It is proposed to review the requirements of trained personnel from time to time, so as to ensure speedy adjustments.

PHASING OF OUTLAY UNDER THE STATE PLAN

While the Second Five Year Plan has been prepared in terms of the long range objectives set out in the Plan and allocations for each head and distribution among different schemes over the Plan period have been worked out in detail, the development programmes to be undertaken each year have to be settled in the light of the financial and material resources and trained personnel available. In the case of major schemes like Irrigation and Power, once the scheme is started, it will have to be carried out with expedition. In the case of other schemes, however, the pace of implementation can be adjusted. This is specially so where lumpsum provisions have been made and concrete schemes to be taken up in different parts have to be settled from year to year. Annual Plans within the frame work of the Second Plan will, therefore, have to be prepared in greater detail and these will also assist in assessing the progress of work. The five year programme of work has, therefore, been suitably phased and the Development Programme for 1956-57 or the first year of the Second Plan period has been prepared in detail and published separately.

The phasing of outlay over the remaining years has also been done. The following broad principles were borne in mind while phasing the expenditure on the Plan, viz., :—

(*i*) The Revenue expenditure in each year is kept within the Revenue resources anticipated.

(*ii*) Care was taken to see that the expenditure per year was not provided purely in the ratio of 1/5th of the total amount but realistic estimates were made for each scheme after taking into account the time taken for settling preliminaries for construction of buildings, purchase of equipment, etc.

(*iii*) Schemes relating to training have to be started in the earlier years of the Plan period so that the personnel required for implementation of the Schemes becomes available.

(*iv*) Where a number of institutions are proposed to be set up, these have been staggered so as to maintain a fairly uniform tempo of developmental activity throughout the Plan period.

(*v*) In the case of Irrigation and Power Schemes full provision has been made in the first two years for completion of schemes carried over from the First Plan. In the case of new schemes, limited provision has been made in the earlier years to start such of the schemes as are ready and approved. The expenditure on new schemes has been phased so as to reach its peak in the third and fourth years of the Plan. In order to ensure that the provision made in the Plan is fully utilised, too much is not left to be done in the last year. In the overall phasing for Irrigation and Power schemes, the implementing capacity of the State has also been kept in view.

(*vi*) The expenditure on the Community Development Projects and National Extension Service Programme has been phased in conformity with the pattern laid down by the Community Projects Administration so as to cover the entire State with National Extension Service Blocks by the end of the Second Plan period.

EMPLOYMENT AND THE PLAN

The employment potential of the Second Five Year Plan of Bombay State is worked out in two parts, viz., (*i*) construction phase and (*ii*) continuing phase by reference to each scheme included in the Plan. An abstract showing the employment reached in the peak period of the Plan under the two phases is appended, as Appendix B to this chapter. The total figure of manmonths shown in the last column of the abstract represents the total manmonths for all the five years. These figures do not include employment which will be generated in the private sector as a result of loans or grants which will be given to local bodies, voluntary agencies, co-operative societies etc. As the total outlay on these schemes comes to about Rs. 40·5 crores, the employment generated by these schemes is expected to be substantial.

The total direct employment under Government likely to be generated by the Schemes in the State Plan will be 4,03,608 persons for 1,31,41,699 manmonths of which nearly 3·31 lakh persons will be employed on construction and 72,310 persons will be employed on the continuing phase. Adding to this employment which would be generated in the private sector as a result of the loans and grants which will be given by the State Government to Local, co-operative and private bodies, the potential of direct employment under the State Plan may be estimated at about 5 lakh persons.

The bulk of the employment will be under irrigation and power which will be about 2 lakh or 40 per cent. of the total. Under Agriculture and Community Development employment would be 1,38,157 or 29 per cent. of the total. The employment under Irrigation and Power will be largely on construction while a good portion of the employment on Community Development Projects and National Extension Service would be continuous.

PUBLIC PARTICIPATION

The impact of the State Plan on the economic and social life of the State can be judged mainly by reference to the physical targets visualized under different Heads. A brief mention of these has been made above. The details of these are given in the description relating to each scheme. There are, however, several Schemes in the Plan which afford scope for stepping up the targets if the measure of public participation is increased. The people have an active role to play in the implementation of such schemes of local character like construction of roads, wells, school buildings etc. The field of Co-operation affords yet another and wider opportunity for public participation particularly through co-operative labour organisations which can render help on major projects. Voluntary organisations are being encouraged to enlarge their scope of social welfare activities and equip themselves with adequately trained social workers who can take larger responsibilities in the implementation of welfare measures.

APPENDIX A

PRINCIPAL PHYSICAL TARGETS PROPOSED UNDER THE SECOND FIVE-YEAR PLAN—BOMBAY STATE—(1956-61)

Items	Physical targets	
	During 1956-61	On completion
1	2	3
1. AGRICULTURE AND IRRIGATION—		
(i) *Area to be irrigated (in acres)*—		
(a) Multi-purpose Projects	....	6,14,000
(b) Major Irrigation Projects	6,95,700	44,83,300
(c) Medium Irrigation Projects	2,74,000	5,55,800
(d) Minor Irrigation Works	62,000	81,200
(e) Tube Wells	66,000	80,000
(f) Irrigation Wells	8,500	8,500
(g) Co-operative Lift Irrigation	20,000	20,000
(h) Various schemes under Community Developments Projects/National Extension Service.	3,00,000	3,00,000
	14,26,200	61,42,800
(ii) *Improved Seeds*—		
Areas covered by improved seeds (acres)	1,76,65,000	......
(iii) *Land Improvement*—		
(a) Mechanical Cultivation (acres)	19,000	......
(b) Soil Conservation (acres)	7,14,000	......
(c) Reclamation of Khar Lands (acres)	16,261	.. ..
(iv) *Training*—		
(a) Talathis	6,000	......
(b) Gram Sevaks and Gram Level Workers	1,850	......

Items	Physical targets	
	During 1956-61	On completion
1	2	3
2. ANIMAL HUSBANDRY—		
(*i*) New Veterinary Dispensaries	40	......
(*ii*) Veterinary Dispensaries to be taken out from Local Bodies.	40	......
(*iii*) Artificial Insemination Centres and Sub-Centres.	100	......
(*iv*) *Training*—		
(*a*) Veterinary Graduates	300	......
(*b*) Stockmen	500	......
(*v*) Poultry Improvement Blocks	20	......
(*vi*) Pedigree Bulls to be supplied	1,000	......
3. MILK SUPPLY—		
(*i*) Number of additional Dairy Units for Milk Supply Scheme for Greater Bombay.	20	......
(*ii*) Number of additional towns to be covered by Milk Supply Schemes.	6	......
(*iii*) Number of Rural Milk Producing Centres ...	3	......
(*iv*) Number of Milk Production and Distribution Societies.	92	......
4. FORESTS—		
(*i*) *Afforestation*—		
(*a*) Area (acres)	1,67,183	......
(*b*) Along the roads (miles)	196	......

Items.	Physical targets	
	During 1956-61	On completion.
1	2	3
(*ii*) (*a*) Agave hedges (miles)	3,200	......
(*b*) Bamboos (acres)	170	......
(*c*) Matchwood (acres)	3,400	......
(*d*) Teak (acres)	55,800	......
(*e*) Medicinal Plants (acres)	12	......
(*f*) Lac cultivation (Number of trees to be infested).	25,000	......
(*iii*) Soil Conservation in Forest areas (acres)	32,324	......
(*iv*) Forest Communications (Miles)	103	......
(*v*) Wet Nurseries (Number)	172	......
5. CO-OPERATION—		
(*i*) New Societies (Number)	6,130	......
(*ii*) No. of members to be enrolled through extension of rural credit	24,00,000	......
(*iii*) Training of the personnel of the Co-operative Department and Co-operative institutions (Number)	79,395	......
(*iv*) Marketing—		
(*a*) Number of regulated markets—		
Major	70	......
Minor	30	......
(*b*) Number of Godowns and Grain Depots	1,002	......
6. FISHERIES—		
(*i*) Mechanisation of fishing craft—		
(*a*) Number of Engines to be supplied	245	......
(*b*) Assistance for construction of boats (Number)	120	......
(*c*) Number of winches to be supplied	25	......

Items	Physical targets	
	During 1956-61	On completion
1	2	3
(*ii*) Training of fisher youths as mechanics (Number)	60	
(*iii*) Shark Liver oil to be manufactured (lbs.) ...	1,00,000	......
(*iv*) Fisheries Schools-New (Number) ...	3	......
7. RURAL DEVELOPMENT—		
Village Panchayats	7,600	......
8. POWER—		
(*i*) Hydro-Installed capacity (K. W.) ...	2,40,000	2,40,000
(*ii*) Thermal-Installed Capacity (K. W.) ...	41,100	51,100
9. INDUSTRY AND MINING —		
(*i*) Production Centres in Cottage Industries ...	162	......
(*ii*) Training Centres in Cottage Industries ...	504	......
(*iii*) Rural Industrialisation-Number of villages to be covered	300	......
(*iv*) Co-operative Sugar Factories (Number) ...	11	......
10. TRANSPORT—		
(*i*) Roads (Miles)—		
(*a*) Cement concreting	237	......
(*b*) State Highways	280	......
(*c*) Major District Roads	300	......
(*d*) Other District Roads	530	......
(*e*) Village Roads	3,335	......
(*ii*) New Bridges (Number)	80	......
(*iii*) Culverts, Causeways, Crossings etc. ...	2,500	......
(*iv*) Nationalisation of Passenger Transport (Number of additional vehicles to be put into operation.)	781	

Items	Physical targets	
	During 1956-61	On completion
1	2	3
11. EDUCATION—		
A—Primary (other than Basic)—		
(*i*) New Schools to be opened (Number) ...	16,140	......
(*ii*) Number of additional pupils	7,59,300	......
(*iii*) Number of Teachers to be trained ...	30,000	......
(*iv*) School Buildings to be constructed ...	14,000	......
B—Primary (Basic)—		
(*i*) Number of Primary Schools to be converted into Basic.	1,184	......
(*ii*) Number of pupils to be brought under Basic Instruction.	3,78,800	......
(*iii*) Number of Teachers to be Trained in Basic Education through Refresher Courses.	10,000	......
C—Secondary—		
(*i*) Number of New Secondary Schools to be opened.	175	......
(*ii*) Number of Pupils to be enrolled ...	1,25,000	......
(*iii*) Number of Secondary Teachers to be trained.	560	......
(*iv*) Number of Secondary Teachers etc., to be trained through Refresher courses.	10,000	......
(*v*) Number of New Multi-Purpose Schools to be opened.	80	......
(*vi*) Number of School Buildings, play grounds and Hostels for Secondary Schools.		
(*a*) School Buildings	140	......
(*b*) Play grounds	200	......
(*c*) Hostels	20	......

Items	Physical targets	
	During 1956-61	On completion
1	2	3
(vii) Number of scholarships, freeships etc., in Secondary schools.		
(a) Loan scholarships	4,400	......
(b) other Scholarships	3,513	......
(c) Free studentships	14,120	......
(viii) Audit-Visual education in Secondary Schools—		
(a) Radio Sets	125	......
(b) 16 m. m. film projectors	40	......
(c) Sound projectors	35	......
(d) Film strip projectors	35	......
D—Technical and Vocational—		
(i) Expansion of Engineering Colleges. (Number of additional pupils to be trained.)	755	....
(ii) Expansion of R. C. Technical Institution. Number of trainees.	310	....
(iii) District Polytechnics—		
(a) Number of Institutions	5	....
(b) Number of trainees	325	....
(iv) Expansion of Technical High Schools—		
(a) Number of Institutions	4	....
(b) Number of Trainees	1,990	....
(v) Additional Courses at Industrial Schools—		
(a) Number of Institutions	3	....
(b) Number of Trainees	610	....

Items	Physical targets	
	During 1956-61	On completion
1	2	3
(*vi*) Printing School—		
(*a*) Number of institutions	1	....
(*b*) Number of trainees	90	....
(*vii*) Part-time courses—		
(*a*) Number of courses	36	....
(*b*) Number of Trainees	4,265	....
(*viii*) Vocational Guidance Bureaux—Numbers	3	....
E—Art Education—		
Number of Trainees in different courses—		
(*a*) Dance, Drama and Music	225	....
(*b*) Town Planning	200	....
(*c*) Drawing and Painting, Teacher Training, Arts and Crafts, Sculpture and Modelling, etc.	475	....
F—Physical Education—		
(*i*) Training of Teachers—Number of trainees..	800	....
(*ii*) National Cadet Corps and Auxuliary Cadet Corps—		
(*a*) Number of Units (N. C. C.) ..	24	....
(*b*) Number of Cadets (N. C. C.) ..	10,000	....
(*c*) Number of Secondary Teachers to be trained in A. C. C.	500	....
(*iii*) Scouting (Number of Troops to be raised)	280	....
G—Social Education—		
(*i*) Adult literacy centres	10,000	....
(*ii*) Libraries	1,000	....
(*iii*) Community Recreation Centres ..	1,000	....
(*iv*) Women Clubs, Associations etc. ..	1,200	....
(*v*) Youth Clubs	3,000	....
(*vi*) Gymnasia	500	....
(*vii*) Childrens' Clubs	5,000	....
(*viii*) Farmers' Unions	2,000	....

Items	Physical targets	
	During 1956-61	On completion
1	2	3
12. HEALTH—		
A—Medical Facilities—		
(*i*) Number of additional beds—		
(*a*) General	2,723	....
(*b*) Leprosy	200	....
(*c*) T. B.	175	....
(*d*) Mental	1,000	....
(*ii*) Number of additional institutions—		
(*a*) Cottage Hospitals	7	....
(*b*) Dispensaries	75	....
(*c*) Maternity Homes	75	....
(*d*) Primary Health Units	187	....
(*e*) Health Units	3	....
(*f*) Mobile Hospital Units	1	....
B—Training—		
(*i*) Number of Doctors to be trained in certain specialities.	120	....
(*ii*) Number of Doctors to be trained in public health matters.	2,189	....
(*iii*) Post—examination training of medical students.	1,450	....
(*iv*) Number of Nurses to be trained ..	185	....
(*v*) Number of X-ray and Laboratory Assistants to be trained.	24	....
(*vi*) Pharmacy—(Number of trainees) ..	200	....
C—Water Supply and Sanitation—		
(*i*) Urban Water Supply Works	93	....
(*ii*) Rural Water Supply Works—		
(*a*) Protected Water Supply	96	....
(*b*) Piped Water Supply	500	....
(*c*) Village Water Supply—(Number of drinking water wells.)	7,880	....

Items	Physical targets	
	During 1956-61	On completion
1	2	3
(iii) Sanitation—		
(*a*) Number of Latrines	10,500	....
(*b*) Drains (yards)	1,78,500	....
13. HOUSING—		
(*i*) Industrial Housing (Number of tenements) ..	18,525	....
(*ii*) Low-Income Group Housing (Number of tenements).	8,320	....
(*iii*) Rural Housing (Number of tenements) ..	5,000	....
(*iv*) Housing of Government Employees—		
(*a*) Gazetted Officers (Bungalows) ..	400	....
(*b*) Non-Gazetted (tenements)	2,500	....
(*v*) Town Planning—		
(*a*) Master Plans for Towns	50	....
(*b*) Resiting of Villages	125	....
14. LABOUR WELFARE—		
A—Training of Industrial Workers—		
(*i*) Technical and Vocational Training Centres.	6	....
(*ii*) Evening Classes—(Number of trainees) ..	1,590	....
(*iii*) Apprenticeship Training—(Number of trainees.)	1,100	....
(*iv*) Employment Exchanges—(Number) ..	10	....
15. SOCIAL WELFARE—		
A—Welfare Extension Projectss—		
Number of Projects	27	....
B—Welfare of Juvenile Delinquents—		
(*i*) Number of New Certified Schools, Remand Homes, Experimental Pilot Classification Centres, After-care Hostels, etc.	8	....
(*ii*) Juvenile Guidance Centres	4	....
(*iii*) Scholarships for Research	10	....
C—Youth Welfare—		
Youth Service Camps	350	....

APPENDIX B.

Abstract Statement I showing Manpower required for Construction Phase

(m.m.—man month)

Head of Development	1956-57		1957-58		1958-59		1959-60		1960-61		1956-61	
	No.	m.m.	No.	mm.	No.	m.m.	No.	m.m.	No.	m.m.	No.	m.m.
1	2		3		4		5		6		7	
Agriculture and Community Development.	36479	306160	51351	466952	64877	561786	78746	614942	84182	677535	91935	2666481
Irrigation and Power ..	86130	988429	135580	1584458	142999	1669115	125177	1467856	107182	1088279	200489	6969022
Industry and Mining ..	463	2742	240	1710	110	1320	117	1254	....	....	463	7026
Transport and Communication.	4559	51028	4247	47284	4123	45796	3123	34960	4125	46264	4879	225332
Education ..	10605	44900	16122	44119	8792	34884	2406	28605	2302	27591	17383	180099
Health ..	1689	20084	3540	41065	3970	47387	2559	30610	2208	26378	4305	165532
Housing ..	5317	63804	7053	84636	9868	118416	9868	118416	7483	89796	9868	475068
Other Social Services ..	715	6540	1093	8637	1172	8080	1320	7920	1332	7992	1898	39591
Scientific and Industrial Research, etc.	....	....	78	936	....	....	....	....	....	....	78	936
Total ..	145957	1483687	219254	2279827	235911	2486784	105650	2304563	208814	1963835	331298	10729087

Abstract Statement II showing Manpower required for Continuing Phase

(m, m.—man month)

Head of Development	1956-57		1957-58		1958-59		1959-60		1960-61		Total 1956-57		Total for completion
	No.	m.m.	No.	m.m.	No.	m.m.	No.	m.m.	No.	m.m.	No.	m.m.	
1	2		3		4		5		6		7		8
Agriculture and Community Development.													
Agricultural production	1210	14520	1301	15612	1352	16224	1377	16524	1402	16824	1402	79704	
Land Development ..	10802	91510	7332	70044	7246	62116	1049	11856	1085	12288	10826	247814	
Minor Irrigation ..	54	648	142	1704	494	5928	846	10152	1198	14876	1198	32808	
Warehousing and Marketing	57	618	99	1188	151	1812	201	2532	271	3252	271	9402	
Animal Husbandry ..	787	8871	808	9636	481	5772	487	5844	487	5792	809	35915	
Dairying and Milk Supply	328	3120	455	5460	1835	22020	2735	32820	2735	32820	2735	96240	
Forests ..	5817	46210	7454	61843	8705	72978	8400	69160	5846	46127	9282	296318	
Fisheries ..	67	686	95	1052	132	1580	132	1580	132	1580	132	6478	
Community Development/National Extension Service and Rural Development	2470	29640	4695	56340	7570	90840	9990	119880	13115	157380	13115	454080	
Co-operation ..	1133	12871	4580	37674	4888	45282	5363	51902	5662	55598	5730	208327	
Miscellaneous ..	6	72	8	96	678	7092	282	3322	32	380	722	11872	
Total—Agriculture and Community Development.	22731	208766	26964	260649	33532	332544	30862	325582	31965	346417	4622	1473958	

Head of Development	1956-57		1957-58		1958-59		1959-60		1960-61		Total 1956-57.		Total for completion.
	No.	m.m.	No.	m.m.	No.	m.m	No.	m.m.	No.	m.m.	No.	m.m.	
1	2		3		4		5		6		7		9
Irrigation and Power ..	....	....	807	9684	4218	47839	7158	84846	8851	104922	8851	247291	
Industry and Mining ..	416	4556	770	9180	964	11604	1157	13920	1324	15924	1347	55184	
Transport and Communication.	1567	18174	1717	19944	1948	22496	2201	25432	2465	28236	2549	114282	
Education ..	3054	25574	4804	57602	6530	77267	8022	96262	9662	102944	9121	359649	
Health ..	611	6169	998	11867	1172	13990	1430	17136	1710	20466	1710	69628	
Housing ..	92	1104	92	1104	92	1104	92	1104	92	1104	92	5520	
Other Social Services ..	514	5856	691	8299	840	9756	2091	24912	2185	26035	2185	74858	
Scientific and Industrial Research, etc.	152	1694	219	2472	223	2628	227	2700	233	2748	233	12242	
Grand Total ..	29137	271893	37062	380801	49519	519228	53242	591894	58487	648796	72310	2412612	

CHAPTER IV

PROGRAMME FOR AGRICULTURE

I

AGRICULTURAL PRODUCTION

The total area in the State is about 706 lakh acres, out of which the net cropped area, is nearly 413 lakh acres. The gross cropped area is about 432 lakh acres, i.e. the area sown more than once is about 19 lakh acres.

From the point of view of rainfall only about a third of the area is 'not liable to famine', while nearly 40 per cent. of the area is known for frequent occurrence of scarcity. The remaining 27 per cent. of the area is 'very liable to famine'. The present area under irrigation including the area irrigated by private wells is about 6·8 per cent. of the total cropped area.

The areas under foodgrains and other crops are given in the following statement:—

Crop	Area in lakhs of acres
1. Foodgrain (cereals and pulses)	294
2. Sugarcane	2·38
3. Fruits and vegetables	3·42
4. Cotton	38·53
5. Oil seeds	42·90
6. Fodder crops	37·69
7. Other crops	13·08
	432·00

The potentialities of agricultural development in the Bombay State lie mainly in getting increased production of all these crops in lands already under cultivation. This is possible, if further intensive research is undertaken, and the results obtained are applied to all lands under cultivation. Since irrigation facilities are limited and are always going to be so, by far the largest part of the cultivated area must inevitably continue to depend on natural precipitation. It is, therefore, imperative that measures to conserve soil and moisture, are undertaken. In addition, it would be necessary to adopt improved agronomic practices, such as dry farming methods, and increased use of improved seeds, manures and fertilizers, will have to be made. Though the area classified as culturable waste is small, it is necessary that it should be scientifically surveyed with a view to assessing the technological and economic possibilities of bringing it under cultivation.

The most immediate and important problem is of getting increased production from the existing lands under cultivation. The present production of different crops can be increased very considerably by using improved seeds, judicious use of manures and fertilizers, adoption of improved culturable practices and by taking adequate precautions against pests and diseases. To help agricultural development, it is essential that irrigation facilities are made available on as large a scale as possible by resorting to different types of major, medium and minor irrigation works and since such irrigation possibilities would not be feasible over a large area, soil conservation measures are of paramount importance. Quite an appreciable area of the terrain of this State is undulating and quite a substantial area is affected by perennial weeds. The great need of reclaiming such lands by levelling and deep ploughing of the weed affected areas is obvious.

Action for increasing production by adopting a variety of improved agricultural practices was undertaken during the last decade, but more particularly during the First Five-Year Plan period. A few details of the important schemes undertaken and schemes proposed to be taken up in the Second Five-Year Plan period are given below.

(i) *Improved Seeds.*—Research work on evolving better quality and better yielding varieties of different crops has been in progress throughout the last decade. Arrangements to multiply the improved seeds and supply it to the cultivators were also made. Fourteen schemes for multiplication and distribution of improved seeds of paddy, wheat, bajri, jawar, maize, nagli and gram are in operation throughout the State. Out of a total area of 83 lakh acres suitable for using improved strains of seeds in this State an area of about 41·5 lakh acres was covered by the end of March 1955 in addition to an area of nearly 2 lakh acres covered by similar schemes under the Community Development Projects and National Extension Service Programmes.

Schemes for multiplication and distribution of seeds of improved strains of crops, which were started during the First Five-Year Plan, will be continued during the Second Plan period. It is proposed to set up small seed multiplication farms in 115 talukas of the State. Each farm will consist of about 25 acres of land with a seed store. These farms will facilitate multiplication of improved seed and will result in quicker distribution of improved seed and coverage of larger area.

(ii) *Manures and Fertilizers.*—Greater use of manures and fertilizers was continuously advocated by the Department during the last decade. Digging and utilisation of additional compost pits, preparation and use of town compost farm yard manure and chemical fertilisers have shown a steep increase in the First Five-Year Plan period. Nearly 8·75 lakh tons of rural compost, 3 lakh tons of farm yard manure and 50 thousand tons of chemical fertilisers are now being used annually. This work in the initial period of the First Five-Year Plan was carried out by the departmental staff. Manure mixture factories were opened departmentally and mixtures supplied to the cultivators. With the de-control of commodities, as well as the necessity of the extension staff paying their entire attention to their legitimate duties of agricultural extension, the manufacture and distribution of fertilisers has been now entrusted to the normal trade channel, giving preference to co-operatives, wherever feasible.

Propaganda for the production of compost manure by the cultivators will be continued by the extension staff. This work has gone ahead considerably and it is expected that by the end of the Second Five-Year Plan period the bulk of the material available in the rural areas which is fit for preparing compost will be utilised accordingly. Such is not the case with the material available in the urban areas. It is expected that six lakh tons of compost can be prepared every year from the urban wastes, whereas only 2·6 lakh tons are prepared at present. It is proposed to reach the maximum capacity of 6 lakh tons by the end of the Second Plan period.

(iii) *Improved cultural practices.*—Agronomic experiments involving different cultural practices and fertiliser and irrigation water experiments were led out on all Government farms and the results obtained were propagated to the cultivators through the extension staff. Some of the outstanding achievements in this connection were demonstrated by having nearly 6,000 demonstration centres on cultivators' fields spread all over the State. For example, paddy cultivation according to the

Japanese Method, was advocated and demonstrated in the paddy growing areas of the State. Rust resistant varieties on wheat were evolved and improved seeds supplied to the cultivators. M-35-I and Chafa Gram seeds were supplied on a very large scale all over the State. Sugarcane research work has been undertaken throughout the last decade and particularly so in the First Five Year Plan period. Different varieties obtained from Coimbatore, with a view to finding out their suitability for the Bombay State were tried. Similarly, water requirements of the sugarcane crop were studied. Cultural and manurial experiments were also carried out, and the results obtained passed on to the sugar factories and the sugarcane cultivators. Cotton is a major crop in this State. Cotton breeding work for high yielding and better quality cotton has been in progress throughout the last decade, but the tempo of the work was far greater during the First Five Year Plan period. Additional areas were also brought under cotton. As regards oil-seeds, the area thereunder is on the increase. Improved varieties of groundnut, sesamum and castor are being supplied to the cultivators on a large scale.

Research work on improved agricultural practices will be intensified during the Second Plan period. Similarly the scheme for introducing dry farming methods will be continued. Since the larger part of the State falls under the precarious rainfall zone, the importance of dry farming cannot be overemphasised. Research and development work on sugarcane and cotton will also be continued. It is proposed to open a regional coconut research station during the Second Plan period.

(*iv*) *Pests and diseases.*—The Northern portion of the State was affected by locust during the First Five-Year Plan period. A locust protection organisation has therefore been set up. The incidence of the locust attack and damage during the last three years has considerably decreased. The crop protection section and the anti-locust services have been now integrated and a combined service for protecting the crops against pests and diseases has been organised. A special crop protection service has been set up for sugarcane.

Schemes for investigation into bacterial and fungoid diseases and into pests would be undertaken during the Second Plan period, in addition to continuing the existing schemes for research in this field.

(*v*) *Minor Irrigation.*—The Department of Agriculture has been actively advocating digging of additional wells and use of pumping plants. Large amounts of tagavi loans have been given to the cultivators for this purpose. Service to locate likely water supply by use of water finding machine is rendered by the Department. Similarly, engines of reliable make were supplied to the cultivators. During the period from July 1951 to the end of September 1955 about 7,085 new wells were constructed and 6,854 old wells were repaired. The Department of Agriculture has also constructed and run 18 lift irrigation schemes in different parts of the State. These are now proposed to be handed over to suitable co-operative bodies. Boring work for tapping underground water resources and, in one district, blast operations to improve the existing well water supply were undertaken. The boring work has been now entrusted to the District Local Bodies and Co-operative bodies in certain districts. In the Second Plan improvement of irrigation wells by boring and blasting will be undertaken. A provision of Rs. 7·27 lakhs has been included in the Plan for this purpose.

In addition under the various programmes of scarcity works and Grow More Food Campaign, the State Government has undertaken over 1,900 minor and medium irrigation works at an estimated cost of Rs. 1,713 lakhs. Many of these works have been completed and have brought a total area of about 2,14,000 acres under irrigation. An additional area of 4,68,000 acres will be brought under irrigation during the Second Plan period when all these works will be completed. Thus the various minor irrigation works started in the First Plan are expected to bring a total area of 6,82,000 acres under irrigation on full development. A total expenditure of about Rs. 801·57 lakhs is expected to have been incurred on these works up to the end of the First Plan period and a provision of about Rs. 329·57 lakhs has been made in the Second Plan for completion of the works in progress. Besides, a provision of Rs. 1·5 crores has been included in the Second Plan for taking up new minor irrigation works.

In certain tracts of North Gujarat, viz., Ahmedabad, Banaskantha and Mehsana Districts, where the soil is alluvial but the region is arid and where it is not possible to construct flow irrigation schemes at economic cost, a programme of drilling 400 tube wells was drawn up under the First Five-Year Plan. Till the end of December 1955 about 270 tube wells were drilled and 170 tube wells were energised. An area of about 40,000 acres is expected to have been brought under irrigation of tube wells by the end of the First Plan period. Necessary provision has been included in the Second Plan for drilling the remaining tube wells carried over from the programme under the First Plan. In addition a provision of Rs. 1·5 crores has been made in the Second Plan for taking up a new programme of 400 tube wells which when completed will bring an area of 66,000 acres under irrigation.

Mention may also be made of the extensive programme of major and medium irrigation projects which are dealt with separately.

(vi) *Land development.*—Ever since 1942, when soil conservation in catchment areas was started some 13 lakhs of acres have been bunded. Out of this, nearly 3·37 lakh acres bunding was in deep black soil areas, for which the technique followed was not correct. As this work has failed, a suitable technique is being evolved by experimentation and research. During the First Five-Year Plan period up to 31st March 1955, nearly 7·19 lakhs of acres have been bunded. Nearly half the portion of this work was carried out during the scarcity periods of 1952-53 and 1953-54, when this work provided employment at one time to as many as 1,56,000 persons from the scarcity striken rural population.

A very large part of the State has got deep black soils in the precarious rainfall areas. The importance of bunding these areas cannot be over-emphasised. Research work on an extensive scale will be undertaken during the Second Plan period for evolving a suitable technique.

Soil conservation in the catchment areas of River valley projects is very important from the point of view of preserving the usefulness of these projects. It is intended to make a beginning in this direction by undertaking a reconnaisance survey of the catchment areas of some of the River Valley Projects, proposed to be started during the Second Five-Year Plan.

Contour bunding work was commenced as far back as 1942 and so far about 10 lakhs acres of shallow and medium soil areas have been successfully bunded. During the Second Five-Year Plan period, 7½ lakh acres are proposed to be bunded, at the rate of 1½ lakh acres per year. In addition, work will also be undertaken in the Community Development Projects and National Extension Service areas with the help of funds available under these schemes.

The problem of soil conservation is very important in the heavy rainfall areas on account of erosion which takes place therein. So far very little work on catchment basis has been done in this area. It is proposed to make a beginning by undertaking bunding on about 1,500 acres.

Land has to be thoroughly levelled for paddy cultivation and irrigated farming. The cost of doing this by manual labour is at present very high. It has been found that levelling by bulldozers is cheaper, speedier and more efficient.

The work of ploughing and levelling was started in 1944. During the First Five-Year Plan period up to 1954-55 the following work was carried out :—

(*i*) Deep ploughing	82,217 acres.
(*ii*) Shallow ploughing	57,827 acres.
(*iii*) Harrowing	15,265 acres.
(*iv*) Levelling, bull-dozing, etc.	1,15,347 (hours).

Past experience has shown that bull-dozers have been offering a fairly substantial work spread over a large season as compared to that available for tractors. Since the tractor work had to be subsidised and was found to be uneconomical in working, it has been decided to restrict the mechanical cultivation activities to only levelling and clearance work. During the Second Plan period it is proposed to work 56 bull-dozers in 14 operational units throughout the State. It is estimated that they will work for about 2,18,000 hours and will level about 56,000 acres during the Plan period.

There is vast area of khar and khajan lands admeasuring about six lakhs of acres in the coastal tract of the Bombay State which could be made available for cultivation. The privately owned khar lands were good rice-growing lands in the past but their condition deteriorated very fast after the enactment of the Tenancy Law. The Khar lands were being neglected owing to lack of co-operation, joint responsibility and absentee landlordism with the result that several acres of good cultivable khar land remained uncultivated owing to unrestricted flow of tidal water in them.

Government stepped in to provide for the protection and improvement of khar lands and reclamation of tidal lands in the Bombay State by construction, maintenance and repairs of embankments of the lands concerned and for that purpose enacted the Bombay Khar Lands Act, 1948. Government then established the Khar Lands Development Board. The Board prepares schemes for development of khar lands and when the schemes so prepared are sanctioned by Government as required under the provisions of the Bombay Khar Lands Act, 1948, the Board gets them executed as per plan. At present the Khar lands development schemes are being taken up in the coastal districts of Thana, Kolaba, Ratnagiri, Kanara, Broach and Surat.

The Khar and Khajan lands reclamation scheme was included in the First Five-Year Plan. In the First Plan it was envisaged to reclaim approximately 1,25,000 acres of khar lands out of which an area of about 45,713 acres has been actually reclaimed so far. The work thus done resulted in bringing about 31,424 acres of khar lands under actual cultivation, which yielded approximately 17,666 tons of paddy during last kharif season. The shortfall in the target was due to the fact that the coastal areas of Broach and Surat Districts could not be taken up for reclamation until facilities of flow irrigation were made available to these areas.

An extensive programme for development of Khar lands has been proposed to be included in the Second Five-Year Plan. The programme envisages reclamation of about 16,261 acres of Khar lands at a total cost of Rs. 19,94,000 approximately.

TARGETS OF PRODUCTION

For the purpose of fixing targets of agricultural production for the Second Plan period the average of the production figures for 1954-55 and 1955-56 has been taken as the basis. As against the production of 52,37,000 tons in 1949-50, the production of food-crops (cereals and pulses) during 1954-55 and 1955-56 averaged to 57,59,000 tons. The figures of average production of oilseeds, sugarcane and cotton during 1954-55 and 1955-56 were 7,16,000 tons, 52,95,000 tons and 12,76,000 bales respectively. The additional production of the four commodities on account of schemes included in the Second Plan of the State is estimated as shown below :—

Name of commodity.	Additional production aimed during 1956-1961.
Foodgrains (cereals and pulses)	6,44,000 tons.
Oilseeds	13,000 tons.
Sugarcane	12,29,000 tons.
Cotton	5,16,000 bales.

It is proposed to step up these targets of additional production by readjusting the agricultural programme of the Second Plan.

TRAINING SCHEMES

Specialised training to the technical staff of the Agricultural Department would increase their utility and efficiency. For this purpose, it is proposed to continue the existing Soil Conservation Training Centre where staff employed in Soil Conservation Section of the Department will be given specialised training and officers employed on agricultural research and animal husbandry work will be deputed to institutions of higher training in India.

LAND REFORMS

Consolidation of holdings.—One of the main causes of the progressive diminution of the agricultural yield is the evil of excessive sub-division and the fragmentation of land. To counteract this evil, the Bombay Prevention of Fragmentation and Consolidation of Holdings Act of 1947 was enacted which is a twofold measure for

(*i*) eliminating the existing fragments and putting a bar on creation of further fragmentation (anti-fragmentation part of the Act) ;

(*ii*) consolidating scattered parcels in a holding into compact blocks (consolidation of holdings).

To achieve the object at (*i*) standard areas are to be prescribed for various local areas and all parts of land below such standard areas are to be entered in the village records as fragments in order to restrict their transfer excepting in a way which would merge them in contiguous holding.

As for (*ii*) due to the consolidation of holdings into the contiguous Blocks Land orginally under the boundary strips would be brought under the plough, intensive cultivation and permanent improvements in the land would be encouraged and the cost of cultivation (fencing, watching, etc.) would be cut down. Thus consolidation is the direct method of checking the future evil of fragmentation.

The scheme is therefore, considered to be an important fundamental land mark of agricultural reform and its implementation has been undertaken in 1948. The scheme was subsequently included in the First Five-Year Plan. The scheme being of vast magnitude and required to be implemented throughout the Bombay State by a limited staff, is continuous in its nature. It is, therefore, necessary to include the same in the Second Five-Year Plan.

So far as the work in respect of anti-fragmentation part of the scheme is concerned, standard areas have been prescribed for the whole of the premerger Bombay State plots below such standard areas have been entered in the Record of Rights and breaches of law are being watched. The work of specifying standard areas for the merged ex-State areas is also in progress and the anti-fragmentation part of the Act is expected to be implemented throughout the Bombay State by the close of the First Five-Year Plan.

The over-all picture of the progress so far achieved in respect of consolidation of holdings (second part of the scheme) and the estimated outturn during 1955-56 is as under :—

Year	Achievement	Expenditure (Rs. in lakhs)	Remarks
	Villages		
1	2	3	4
Up to the end of 1954-55 ...	1,060 Completed. +278 in progress.	44·81	
1955-56	800 estimated ...	17·09	As per budget provision.
From commencement to 1955-56	2,138	61·90	

The scheme has passed its initial stage, and the legal and practical difficulties have been overcome by amending the Act suitably and putting the procedure on sound lines. The agriculturists have also realized the benefits of consolidation and are coming forward for co-operation. The progress of the scheme would, therefore, be accelerated in the Second Five-Year Plan.

With the existing staff proposed to be continued in the Second Five-Year Plan, about 4,365 villages from 26 districts (excluding only two districts, *viz.*, Bombay Suburban District and Dangs) covering an area of about 75·99 lacs acres are expected to be completed during the Second Five-Year Plan at an estimated cost of Rs. 70·20 lacs.

Introduction of Survey and Settlement.—Survey for Record of Rights and Introduction of Settlement is the main basic structure on which the entire frame of Revenue Administration rests. The former affords sound protection to those having interests in land in so far as their rights in regard to land are concerned and helps to keep down the litigations arising out therefrom, while the latter operates as a process of deciding what the Land Revenue payable by each holder to Government should be. Both the above operations are essential for an efficient Revenue Administration of the State. Moreover, survey is a pre-requisite for all development schemes such as irrigation works, construction of houses, bridges, etc, etc.

With the above objects in view, an experimental scheme was started in Ratnagiri District in September 1944. Thereafter, in December 1947, it was extended to all the surveyed and unsettled Inam villages of 23 districts in premerged Bombay State. As survey is a pre-requisite for classification and settlement the former is co-ordinated with the latter. Both these schemes were included in the First Five-Year Plan (1951-56) and the over-all picture of the work done up to 31st March 1955 since the commencement of the scheme and that contemplated in the Second Five-Year Plan is given in the statement appended to this Section.

Government has sanctioned additional establishment in 1954-55 for completing the scheme early.

Introduction of survey, classification and settlement in ex-merged State areas spread over 18 districts of the State has also been sanctioned, and the scheme work has been started from 1st December 1954. This scheme has been included in the Second Five-Year Plan.

Statement showing the work done and proposed to be done under the Scheme of Survey and Settlement

Serial No.	Name of the Scheme	Total No. of villages to be dealt with	Villages completed up to 31st March 1955	Estimated date of completion	Work contemplated in the Second Five-Year Plan 1956–61					Total
					1956–57	1957–58	1958–59	1959–60	1960–61	
1	2	3	4	5	6	7	8	9	10	11
1	*A—Khoti Survey—*									
	(*i*) Survey	961	731	31st March 1956 ...	...	...	...	...	...	...
	(*ii*) Record of Rights ...	961	545	31st March 1957 ...	266	...	...	...	...	266
	B—Inam Villages—									
	(*i*) Survey	1,192	754	31st March 1956 ...	138	...	...	...	...	138
	(*ii*) Record of Rights ...	Entrusted to Revenue Department Talatis.		To be revised 30th September 1956.						
2	(*i*) Classification	1,259	689	31st March 1957 ...	320	...	...	...	...	320
	(*ii*) Settlement (Collector to fix Land Revenue rates now under intimation to Government and Settlement Commissioner according to new Land Revenue Rule 10-0).	1,259	......	To be revised 31st July 1957	...	...	...	...	...	...

Serial No.	Name of the Scheme	Total No. of villages to be dealt with	Villages completed up to 31st March 1955	Estimated date of completion	Work contemplated in the Second Five-Year Plan 1956–61					Total
					1956–57	1957–58	1958–59	1959–60	1960–61	
1	2	3	4	5	6	7	8	9	10	11
3	Introduction of Survey, Classification and Settlement in ex-State merged areas.	*Survey* 4,015 ...	*Survey* 76	*Survey* 1959–60. ...	803	803	803	727	...	3136
		(18 districts) ...	Classification. 75	Classification 1959–60. ...	809	809	809	736	...	3163
		Scheme work started on 1st December 1954.								
		Classification—4,047			1961–62=142					
		Settlement—1,000			1962–63= ...					

II

ANIMAL HUSBANDRY

The Animal Husbandry improvement programme falls under the following four main heads :—

1. Cattle Development,
2. Sheep Development,
3. Poultry Development,
4. Provision of veterinary facilities.

A review of the work done and the scope for future development is given below for each of these sections :—

1. CATTLE DEVELOPMENT

The Bombay State has a bovine population of 16·14 million of which 11·93 million are cow-class and 4·2 million are buffalo-class. The majority of the animals are of the non-descript type and their performance is not satisfactory. Considering the present cattle population and the feeding conditions, the problem of improvement is of numbers, quality and feed. In other words every attempt has to be made to breed superior animals, feed them properly and reduce or eliminate the unproductive. Since the creation of the Livestock Section in 1919, selective breeding among the cattle in the pure-bred zones is encouraged by subsidising the maintenance of the bulls. The cattle breeding farms were established for the Kankrej breed at Chharodi in Ahmedabad District, and Amritmahal breed at Bankapur in Dharwar District. In 1945, Government considered the necessity of expanding the scope of livestock improvement work. Funds were sanctioned for organising two cattle breeding farms—one for the Gir breed at Kopergaon in Ahmednagar District for studying the problem of introducing the dual purpose animals in the irrigated areas and the second for the Dangi breed at Igatpuri in Nasik District, to study the problem of breeding superior animals, for being reared in the heavy rainfall tracts. Simultaneously the small cattle breeding farm at Tegur, in Dharwar District, was revived to maintain a Dangi herd. It was decided that the scope of cattle improvement should be extended beyond the small breed zones and the work of establishing supplementary cattle breeding centres was undertaken. Each centre comprises five villages with an approximate cow population of 1,000 animals, wherein ten breeding bulls and fifty pure-bred cows were located, by subsidising the farmers. Up to 1950 as many as 72 centres 13 for the Kankrej breed, 54 for the Khillar and 3 for the Dangi breeds were organised and the remaining were established for the minor breeds such as Nimar, Gir and Krishna Valley.

With the object of expanding the livestock improvement activities, the essential supervisory staff at the divisional, district and village level was provided.

In 1952, the Indian Council of Agricultural Research decided that the diffused cattle improvement programme undertaken in the different States, without proper supervision, would not yield any substantial results. It also took the view that the problems of breeding, feeding and of evolution of superior animals were so vast that sporadic attempts should be totally discouraged and definite policy adopted in providing funds and planning an improvement programme in a specific area. The supply of pure-bred bulls should be assured for at least a period of 15 years and the work of supervision maintained by trained personnel. A scheme embodying these principles was formulated and termed as the 'Key Village

Scheme ' for cattle improvement. Each key village comprises a cattle population of 500 breedable cows and/or buffaloes and such four or more key villages constitute a 'Key Village Centre'. An Artificial Insemination Centre is attached to the Centre along with the necessary bulls and staff to supervise the work in the key villages. Further provision is also made to appoint higher supervisory staff so that the data of breeding and evaluation is maintained properly. In 1945, the cattle improvement work undertaken under different schemes helped in breeding of fifty-two thousand cows while, in 1954-55 the breeding bulls located in different centres would enable the farmers to grade one lakh and fifty-three thousand cows.

The objectives of the scheme proposed in the Second Five Year Plan are :—

(*i*) To establish cattle breeding stations for the principal breeds of cattle so that the problem of supply of pedigree bulls can be effectively dealt with and a sound foundation is laid to undertake experimental work of evolving superior strains. There are three major regions in this State namely, the sandy plains of Gujarath, the Deccan plateau with two distinct areas *viz.*, one receiving heavy rainfall and the second comprising the arid eastern belt. Each of these tracts has one major breed i.e. Kankrej for the Gujrath plains, the Dangi for the heavy rainfall areas and the Khillar for the arid districts of Deccan and Karnatak. The work regarding research and improvement of cattle which was started during the First Five Year Plan will be continued during the Second Plan period. Since a fully equipped cattle breeding station, with land resources and necessary herd strength, has been established at Chharodi in Ahmedabad District for the Kankrej breed, it is proposed to establish one full-fledged cattle Breeding Farm for the Khillar breed during the Second Plan period. The Khillar breed is one of the important breeds for which a cattle breeding station does not exist at present. The absence of such a station leads to difficulties in selecting pedigree bulls for grading up local cattle. This station will have sufficient land resources and would be able to maintain 100 breeding cows or a total experimental herd of 500 animals.

(*ii*) To continue the activities of cattle improvement in the rural areas so that the work can be carried out on the basis of the suggestions made by the Planning Commission to establish key villages. The present work undertaken with the funds allotted by the State Government will be consolidated at definite centres and supervised by specialised staff appointed for the purpose. The present six key village centres with the artificial insemination centres attached to them will be continued during the Second Plan period. This work will be integrated with the cattle improvement programme to be undertaken in the Community Development and National Extension Service Blocks. Simultaneously the rearing of outstanding bull calves of the major breeds of cattle will be undertaken at the existing livestock farms, so that the key village centres and the sub-centres established in other areas would receive selected bulls, for the grading programme.

(*iii*) To undertake a new scheme for the breeding of the pure breed bulls of the Dangi breed, a cattle breeding station will be started for this purpose at Igatpuri.

(*iv*) To undertake training of the personnel in charge of livestock research and extension work, it is proposed to depute some senior Agricultural Officers in batches for post-graduate animal husbandry training to the Indian Veterinary Research Institute, Izatnagar and to further conduct refresher training course for 84 Agricultural Officers and 150 Agricultural Assistants at the three Agricultural Colleges in the State.

2. SHEEP DEVELOPMENT

There are 2·6 millions of sheep in Bombay State producing about 2·3 million lbs. of wool per annum, the total value of which approximates Rs. 25 lakhs. The major income of the shepherds is from the sale of male lambs which gives them approximately Rs. 1 crore every year. Besides flock-owners get about Rs. 25 lakhs by sheep folding.

Wool, as an animal fibre for production of apparel, is essential to the country and has no substitute. The wool clip of the Bombay State lacks uniformity in fibre composition and the fleeces are coarse, coloured and hairy. It is utilised for the production of 'Kamblis' for sale in the local market. The major portion of the raw wool produced in the districts of Gujarath is exported as carpet wool. Sheep also contribute to the most important protein food in the Country. Taking these factors into consideration plans for research in evolving new sheep, studies in wool fibres and investigation into utilisation of new types of wools have been formulated on all India basis, so that the country can produce superior wools to attain self-sufficiency.

Since the establishment of the Sheep Breeding Research Station, Poona, under the auspices of the Indian Council of Agricultural Research in 1937, the problem of sheep and wool improvement in Bombay State has gained a great impetus. A well equipped Wool Research Laboratory, the only one of its kind in India, has been established to determine the quality of wool and to guide the selection of animals.

By selective breeding it has been possible to improve the quality and quantity of wool yield in the Deccan Sheep. The hairiness and kempy fibres have been eliminated and a pure woolly type of sheep is being evolved. The wool yield of this new type has been increased by 25 per cent.

Cross-breeding work has been very encouraging as the hybrid progeny yield 4-5 lbs. of greasy fleece i.e. about five times more in quantity than the indigenous sheep, with a fine fibre composition. These cross-breeds are being tried in different climatic and grazing conditions to study whether these can be acclimatised to the local conditions.

Six sheep breeding sub-stations have been established in the Bombay State under the First Five Year Plan. The new strains evolved at the main Sheep Breeding Research Station, Poona, are being tried on these farms for their suitability and adaptability under different climatic and environmental conditions. The selected rams produced at these sub-stations are supplied to the flock-owners for grading and improving their flocks. Each farm has been developed to produce and supply about 20-25 rams every year. Thus annually 200 rams are given out for sheep improvement work. These rams can be utilised for grading a sheep population of 50,000 animals.

It is proposed to continue and develop during the Second Five Year Plan period the research work for improving sheep and wool at present being done at the Central Sheep Breeding Research Station, and the Wool Testing Laboratory at Poona and the sheep breeding stations at Patan in Mehsana District to carry out the genetical plan to evolve new types of sheep. There is an increasing demand for the supply of selected improved sheep particularly rams from the sheep rearing areas in the neighbourhood of the existing sheep breeding research sub-stations and also from the other sheep rearing districts. It is therefore essential to strengthen and expand the existing six sheep breeding stations so that facilities for raising adequate number of improved flocks and the required number of fine woolled rams are made available.

3. POULTRY DEVELOPMENT

The Bombay State has a total poultry population of 6·2 million birds. The annual contribution to the agricultural economy is estimated at Rs. 180 Lakhs due to the sale of eggs and table birds. The average egg consumption per head per year is estimated at six eggs. The demand for eggs and poultry meat is increasing and the maintenance of poultry both in the urban and rural areas is becoming extremely popular. The rearing of pure-bred of improved poultry is being taken up by many a farmer in the districts of Sholapur, Kolhapur, Ahmednagar, Nasik, Khandesh, Satara, Belgaum, Bombay North and areas in the neighbourhood of Surat and Navsari Talukas. Since the launching of the Community Development and National Extension Service Organisation, the rearing of pure-bred poultry in the rural areas has received considerable impetus.

There are three poultry breeding stations established by the Department of Agriculture. These along with six sub-stations can supply 3,500 birds and 10,000 hatching eggs of the popular breed such as white leghorn, Rhode Island red Minorca, Austrolop etc. Simultaneously, intensive poultry improvement programme has been undertaken in the vicinity of the existing poultry breeding farms and in concentrated areas in Sholapur, Ahmednagar and Kolhapur Districts. The farmers desirous of maintaining pure-bred birds are helped with the subsidy for purchase of foundation stock and the material for building hygienic poultry houses.

Under the Second Five Year Plan, baby chicks imported from abroad and raised on existing poultry farms will be reared up to the age of five months and supplied to cultivators in selected centres. 20 Poultry improvement blocks will be selected and in each block 300 birds will be located. Training in Poultry farming will be imparted to persons from these poultry improvement blocks.

4. VETERINARY FACILITIES

Expansion of the supervisory staff of the Veterinary Department.—Before the commencement of the Post-War Reconstruction Programme in 1947 there were 142 Veterinary dispensaries in the State, most of which were maintained by District Local Boards and Municipalities and the Veterinary Department of the Government used to exercise technical control over them with the assistance of 5 Divisional Veterinary Officers. During the period of the Post-War Reconstruction Government opened 24 Veterinary Dispensaries and assumed control of 31 Veterinary Dispensaries local bodies. Besides, 81 Veterinary Dispensaries came under the control of the Department as a result of merger of States.

Under the Second Five Year Plan it is expected that the number of Veterinary Institutions which is already 284 will be increased considerably, besides other developmental activities. In order to have the proper supervision over the District activities, it is absolutely necessary to have one Divisional Veterinary Officer in Bombay Veterinary Service, Class II, for every District excluding the small Districts of Dangs and the Bombay Suburban District. With this end in view it is proposed to have 5 additional Divisional Veterinary Officers in the first instances during the Second Five Year Plan period by stages, *viz.* 3 in the first year and 2 in the 4th year of the Plan, with necessary clerical and other staff so that each Divisional Veterinary Officer would have a charge of 2 districts at the most at the end of the Plan period.

Owing to expansion of the activities of the Department it has become necessary to augment the staff in the office of the Director of Veterinary Services for shouldering the growing responsibilities. It is proposed to create posts of Branch Superintendents and to provide a Personal Assistant to the Director and a Technical Assistant to deal with professional matters under the above scheme.

Improvement of the Bombay Veterinary College.—The Bombay Veterinary College is in existence since 1896 and is the oldest institution of its kind in the country. It conducted a diploma course till 1945, when it was affiliated to the Bombay University and the diploma course was replaced by a degree course leading to the degree of B.Sc. (Vet). In order to get the required number of Veterinary Graduates for employment in the field to meet the growing requirements in the Veterinary Services and the demands of agriculturists and dairymen, the admission to the Bombay Veterinary College has been raised to 60. In order that there should be adequate facilities available a Patho-Bacteriological Laboratory is being constructed. Under the Second Five Year Plan it is proposed to complete the work of construction and to provide certain equipment and furniture for the same.

Training of Stockmen.—Owing to the shortage of Veterinary Graduates it became impossible to open new Veterinary Dispensaries and difficulties were also experienced in carrying out the immunisation of cattle against various contagious diseases, castration of scrub bulls and maintenance of a reserve force for checking epizootics. As an emergency measure, therefore, a one year course was started under the old Post-War Reconstruction Plan and 333 stockmen were trained, of whom 219 were absorbed in the Department. Due to financial stringency the classes were closed down in the year 1950. To carry out immunization of cattle against diseases on a mass scale and also to provide intensive veterinary aid under the National Extension Service and Community Development Programme a large number of stockmen is required. To meet this demand stockmen's Training Centres have been started at three places and are proposed to be continued during the Plan period.

Establishment of a Disease Research Station, Poona.—Pursuant to the recommendations of the Indian Council of Agricultural Research, it was proposed under the old Post-War Reconstruction Plan to have Animal Husbandry Research Station having 3 sections in the State, viz., (*i*) Nutrition, (*ii*) Genetics and (*iii*) Disease investigation, to consider various problems relating to Livestock welfare. Of this, only one Section, viz., Disease Investigation, is in existence since 1932. Two schemes relating to the investigation into diseases of cattle and poultry formerly subsidised by the Indian Council of Agricultural Research and Bombay Government on 50 : 50 basis were taken over by Bombay Government from the 1st April 1948 and 1st April 1950 respectively, along with the staff and these have been continued under the First Five-Year Plan. A scheme for investigation into diseases of sheep, and goats which was subsidised by the Indian Council of Agricultural Research on 50 : 50 basis was terminated with effect from 1st March 1954. Duties of the investigation staff are to investigate disease conditions met within the field both obscure and otherwise, to assist the field staff in arriving at a quick diagnosis to provide a liaison between the Veterinary Department and the Indian Veterinary

Research Institute, and to undertake investigation of important problems in collaboration with that Institute. There is a considerable amount of research work to be carried out on disease of livestock already known and unknown including those caused by parasites. Research into manufacture of sera and vaccines has got to be undertaken with a view to supply to the field cheaper and at the same time more efficatious products. It is, therefore, proposed to establish a Disease Research Station to undertake research in the field of bacteriology, pathology and parasitology by appointing experts in the line at the Station. During the Plan period, however, it is proposed to provide buildings required for the Research Station consisting among other items rooms for 3 Laboratories for the Bacteriological, Pathological and Parasitological Sections and a big room for a Laboratory for the Officer in charge of the Station to begin with.

Scheme for study of cattle sterility in the Bombay State.—A team of Food and Agriculture Organisation experts in Animal Gynaecology and Obstetrics toured the country and made a survey of the cattle tracts, Veterinary Colleges and other Institutions in the country with particular reference to the problems of sterility and artificial insemination in cattle. In the report to the Government of India they observed that in other countries great advances have been made during the last 20 years, in the diagnosis and treatment of sterility in cattle. The problem of cattle sterility is a potential danger to the development of dairy industry. The problem is of all-India importance and so far very little work has been done in the field of diagnosis and treatment of sterility in cattle in this country. The scheme to study the problem has already been started and it is proposed to continue the same in the Second Plan period. The Indian Council of Agricultural Research has agreed to subsidise the scheme on 50 : 50 basis.

Scheme for Investigation of Mastitis in Bombay State.—The scheme for the investigation of Mastitis is already in force in Bombay State. It is proposed to continue this scheme under the Second Plan period. The Indian Council of Agricultural Research has agreed to subsidise the Scheme, on 50 : 50 basis.

Scheme for control of main-fluke diseases of Bovines in the Bombay State with special reference to Nasal Schistosomiasis.—This scheme has been approved by the Indian Council of Agricultural Research which has agreed to subsidise it on 50 per cent. basis. It is proposed to undertake the scheme in the Second Plan period.

Assumption of full control by Government of Veterinary Dispensaries maintained by local bodies.—Formerly all the Veterinary Dispensaries in the State were maintained by the District Local Boards and Municipalities, with financial assistance from Government by way of grant-in-aid and the free services of a Veterinary Officer. The maintenance of Veterinary Dispensaries is not the obligatory function of these Local Bodies and as such expansion of the Veterinary Dispensaries depends upon their will, financial position and other local factors. The dual control also adversely affects the administration. In view of this, it was proposed under the old Post War Reconstruction Plan to gradually assume control of such Veterinary Dispensaries. Accordingly, control of some 32 Veterinary Dispensaries has been taken over by Government. In the Second Five-Year Plan it is proposed to assume control of additional 40 Veterinary Dispensaries run by the local bodies by stages viz. at the rate of 8 Veterinary Dispensaries every year.

Immunization of cattle against diseases etc.—With a view to carrying out mass immunization of cattle against various contagious diseases, such as Haemorrhagic Septicaemia, Black Quarter, Rinderpest, etc., a scheme was launched under the old

Post-War Reconstruction programme and trained stockmen were entrusted with this work. Concentrated efforts are also made to protect cattle entering grazing areas and in breeding tracts. It is proposed to continue the work during the Second Plan period.

Scheme for expansion of the Serum and Vaccine Institute for manufacture of sera and vaccines.—Owing to the difficulties experienced in obtaining from outside sources sera and vaccines in time for the prompt control of contagious diseases, a Serum Institute was established at Bombay in the year 1948 with a Superintendent, Biological Products, and officer in the Bombay Veterinary Service Class I as head. The Goat Virus Producing Station at Bombay and Goat Virus Sub-Depots at Baroda, Jalgaon and Dharwar, all producing Goat Virus Vaccine and Ranikhet Disease Vaccine Laboratory at Poona producing Ranikhet Disease Vaccine were also placed under his control. The Serum Institute in the State at present manufactures only Haemorrhagic Septicaemia and Black Quarter Vaccines and a few doses of Sheep and Goat Pox Vaccine. The Institute would be shifted to Poona in its own buildings by the end of the first year ot the Second Five-Year Plan period when it is expected that the buildings would be ready. Under the Second Five-Year Plan it is proposed to provide necessary facilities to enable the Institute to expand its activities and to meet in full the demands of the State in respect of vaccine, by appointment of additional staff both technical and administrative and by purchasing equipment required in the manufacture of the biological products.

Scheme for eradication of Rinderpest from the Bombay State.—Rinderpest causes about 60 per cent of the total cattle mortality in the country. The Planning Commission after realising the importance f this disease included a scheme for eradication of this disease from the country ounder the Government of India's "Ten Year Programme of Land Transformation". Accordingly a Pilot Project has been launched in this State in the First Five-Year Plan in the Districts of Dharwar, North Kanara, Belgaum and Bijapur. In the Second Five-Year Plan it is proposed to undertake the eradication work in the remaining 24 districts of the State within a period of 2 years, i.e., by the end of the March, 1958.

Scheme for introduction of Artificial Insemination as a method of rapid breeding of cattle.—In view of the fact that the Artificial Insemination as a method of breeding cattle, particularly dairy cattle, offers considerable prospects of promoting the improvement of livestock, Government decided to set up an Artificial Insemination Section in this State. Under this scheme the main Artificial Insemination Centre has been established at Poona in the year 1951 under the charge of an officer specially trained in the United Kingdom in this new technique. Sub-centres have been started at the Veterinary Dispensaries at Junnar, Saswad and Baramati in Poona District, Sangamner in Ahmednagar District, Phaltan in South Satara District and at Kavathi Adda in Poona City proper, and these are showing good progress. In the Second Five-Year Plan it is proposed to continue the existing work as a departmental activity and to open additional main and sub-centres under the Community Development and National Extension Service Programme.

Scheme for mass immunisation of village poultry against Ranikhet disease.—This scheme is already in force in this State and is subsidised by the Indian Council of Agricultural Research. In the Second Five-Year Plan it is proposed to continue the work already started under the scheme.

III

DAIRYING AND MILK SUPPLY

The present annual milk production in the Bombay State is about 3,00 lakh maunds and it is produced by nearly 22 lakh buffaloes and 30 lakh cows. Only a very small fraction of the total cow population, however, contributes towards the milk supply available to human beings, since most of the cows produce milk just enough for calf-feeding. Since the Bombay State has a very large agricultural population, it is felt that given the necessary opportunities the milk production in the State would be appreciably stepped up. Even now, there are certain tracts which produce large quantities of milk but for want of suitable transport and marketing facilities, the same does not become available to the urban population. Since the *per capita* consumption of milk is very low, it is necessary to produce more milk and to make suitable arrangements for its marketing.

The development of milk supply and dairying is indicated below :—

(*a*) Milk Supply to Bombay City.

(*b*) Milk Supply to other Cities and Dairy development.

MILK SUPPLY TO BOMBAY CITY

With a view to ensuring the supply of wholesome milk to the people of Bombay City especially the middle class and poor people, a beginning was made in 1947. A suitable site for colonization of the cattle housed in the congested city stables was therefore selected at the village Aarey about 25 miles from Bombay and 3,100 acres of land were acquired for construction of 30 dairy farm units. The vast hilly and undeveloped area has been developed and 26 ideal dairy farms with up-to-date Dairy Factory to process and bottle about 40,000 gallons of milk have been established. To augment the supplies to the City, considerable dairy development work has also been done in the Anand area of the Kaira District, from where milk is brought to the City, for distribution to the public. In the Anand area the Kaira District Co-operative Milk Producers' Union has done pioneering work and the quantity of milk handled by the Union has now increased to 1,00,000 lbs. The number of affiliated farmer members of the Society has increased to 18,000.

With a view to ensuring adequate supply of milk to larger number of people, it is proposed to provide additional accommodation for colonisation of 10,000 milk cattle and 10,000 dry and young stock. In the suburbs and outside fringe of Greater Bombay the cattle population has increased considerably. Legislation is contemplated to control their number, but irrespective of that it is proposed that a Second Colony should be planned for only 10,000 milking cattle. About 20 dairy farm units will be established at this Colony during the Second Plan period. In due course additional supply of milk would also be obtained from rural areas for which co-operative organisations will be encouraged as and when necessary. It is also proposed to provide for a third colony for keeping about 7,000 dry animals and 3,000 young stock. During the Second Plan period 3 Dairy farm units will be established at the third Colony. The total cost of the Second and the Third Colony is estimated to be Rs. 4·20 crores. Under the Second Five-Year Plan it is proposed to provide Rs. 3 crores out of which Rs. 40 lakhs would be required for completion of work on the existing Colony at Aarey and the balance for meeting part of the expenditure on the proposed Second and Third Colonies. The milk supply will be augmented by about 1,800 maunds per day and there will be 500 additional milk distribution centres at the end of the Second Plan period.

MILK SUPPLY TO OTHER CITIES AND DAIRY DEVELOPMENT

A separate Dairy Development Section of the Agricultural Department was created in September 1946. Dairy surveys of important cities, milk pockets, riverine areas, etc., has been carried out. Milk supply schemes for Ahmedabad, Poona and Hubli-Dharwar have started. Financial assistance to small and large-scale dairy farmers is being given under a scheme in the First Five-Year Plan. The Dairy Development section extends advisory service to dairy farmers and institutions. Milk supply schemes for Poona and Hubli-Dharwar which are running at present, handle daily about 300 lbs. of milk. Financial assistance totalling nearly Rs. 5 lakhs has been given to 114 dairy farmers so far. During 1955-56, a further amount of Rs. 3 lakhs is proposed to be given to about 120 dairy farmers as financial aid.

The main features of the schemes included in the Second Five-Year Plan are as below :—

It is proposed to extend the area of operation of the Poona Milk Supply Scheme to cover about 5 times the number of villages from which milk is collected for being supplied to consumers in the city. New schemes for the supply of milk to 4 other cities in the State having a population of more than 3 lakhs each, will be undertaken during the Second Five-Year Plan period. It is also proposed to set up rural milk producing centres, which are not in the immediate vicinity of the cities where milk supply schemes are operating or will be operated, but from which milk can be transported by rail or by road to these cities. These will benefit producers of milk in these comparatively distant areas.

IV

FORESTS

The total forest area of the Bombay State is 20,852 sq. miles, of which 16,830 square miles is in charge of the Forest Department, 1,769 square miles in charge of Revenue Department and an approximate area of about 2,265 square miles is owned by private persons. On the whole, however, the area under Forest constitutes about 18 per cent. of the total land area as against 33⅓ per cent. advocated in the National Forest Policy. The gap between the objectives set out in the Forest Policy and the area under forests in this State is large. Further, the area of 1,769 square miles in charge of the Revenue Department consists of pasture lands and fodder reserves and also certain tree clad areas classed as protected forests set aside chiefly for the exercise of lopping privileges. Of the 16,830 square miles in charge of the Forest Department, 12,520 square miles constitute Reserved Forest and the remaining 4,310 square miles consists of 1,046 square miles Protected forests, 39 square miles leased forests and 3,225 square miles unclassed forests. The areas of unclassed forests have been added to the State as a result of merger of States and most of these areas require survey, settlement and classification. Only an area of 13,733 square miles of forest is merchantable, of this an area of 10,071 square miles is capable of timber production, the remainder being situated on rocky hills in dry tracts such as East Khandesh, Nasik, Bijapur, Dharwar, parts of Poona and Satara Districts. The latter type of forests forms a sort of scrub jungle producing small timber, firewood, charcoal, hutting material and meets the requirements of villagers for lopping and tahal leaf manure for their rice fields and betel nut gardens, fodder and grazing.

To make the State self-sufficient and to provide for its industrial development as well as for domestic and agricultural purposes the forest area in this State needs to be extended considerably. Further, during the last world war, the commercial forests of this State were irregularly over-exploited, and hence rehabilitation and development of these forests require priority.

The development and utilisation of forest resources is an integral part of the programme for optimum land utilization. Besides, the demand for forest produce for industrial as well as for domestic purposes, has been steadily increasing, with the progress of industrialization and increase in population. More wood is required for wood charcoal, gums and resin become indispensible for certain chemical and other manufacturing industries, wood bark and certain fruits of the forest are required for tanning, wood pulp finds an ever-increasing market for the manufacture of paper, cellulose, artificial silk, etc. For this purpose, new areas need be developed and kept as forest reserves, afforestation is to be undertaken in denuded areas, inaccessible forests have to be opened by providing communications and village forests have to be encouraged for providing a continuous supply of fuel which will release cattle dung for use as manure.

Schemes for forest rehabilitation and improvement were taken up in this State under Post-War Reconstruction and Development Programme in 1947-48 and were continued during the First Five-Year Plan. Several working Plans of the Forest areas were revised and works of construction and repairs to roads and bridges were completed.

With a view to expanding research work in Silviculture and encouraging study of utilization problems and economic forest products, the Research and Working Plans Circle was started. The experimental plantations of various exotics, non-indigenous and indigenous species were undertaken in four Research Gardens at Poona, Haliyal, Shahapur and Nawapur and in five Research Stations at Donja, Dandeli Badami, Nawapur and Shahapur and outside in the forests to the extent of 45 acres. A scheme for experimental planting of the various species of economic importance was drawn up and almost all the experiments were undertaken on statistical designs. Afforestation of Mutha Right Bank Canal was undertaken on an experimental scale with various species suited to the tract. A modest start has also been made to build a drug farm at each of the Research Stations of medicinal plants locally available.

The Second Five-Year Plan envisages an all round development of forests which will provide more labour to the wage earner, more timber for defence purposes and other big consumers, more fuel for domestic use which may save cow dung for manurial purposes, increased grazing possibility for domestic and other cattle and also provide for industrial development in order to ensure the prosperity of the villagers and the State at large.

Afforestation of Arid and Blank Areas.

Due to continued maltreatment of forests, certain areas, particularly hill slopes have been completely depleted of forest growth. In the neighbourhood of populated villages due to illicit cutting, certain blanks have become established. As a result, soil erosion is taking place and if not prevented, the localities will become completely barren and unfit for growth of any vegetation. In the Second Five-Year Plan provision has therefore been made to afforest about 80,575 acres at an estimated cost of Rs. 53,52,000.

Plantations.

(a) *Teak.*—During the last two World Wars, excessive fellings were carried out to meet the defence requirements. In order to raise large scale teak plantation a provision of Rs. 8·40 lakhs is made in the Second Five-Year Plan to reboise 5,600 acres.

(*b*) *Softwood species.*—Under softwood species only Sawar (*Bombax malabaricum*) which has been considered most suitable for match manufacture as well as for packing cases is intended to be raised. Provision of Rs. 4·33 lakhs has been made in the Second Five-Year Plan to raise plantations of this species in an approximate area of 3,400 acres spread over the districts of Khandesh, Surat, Vyara, Kolaba, etc. It is also contemplated to carry out silvicultural operations in an area of 1,000 acres which are already being planted up.

(*c*) *Flowering bamboos.*—The Southern Circle of Bombay State has very valuable teak forests covering an area of roughly 800 square miles. These forests have large stretches of young plantations of teak raised at a considerable expense during the last 30 years. Bamboo flowering in this area is likely to take place in the near future. A peculiar physiological phenomenon of flowering of bamboo creates abnormal situation periodically. In order to strengthen the fire protection measures where flowering takes place and also to take advantage of this occasion to enrich the forest area it is proposed to introduce teak either by seed sowing or by stump planting in as large an area as possible. Provision of Rs. 4 lakhs has accordingly been made in the Second Five-Year Plan.

Establishment of Central Wet Nurseries.

In order to raise plantations efficiently, it is necessary to maintain a stock of robust seedlings for transplanting as well as stump planting in suitable nurseries. Seedlings in very large numbers would also be required to afforest arid and blank areas. It is accordingly considered necessary to set up a net-work of wet nurseries throughout the State, for which a provision of Rs. 15 lakhs is proposed in the Second Five-Year Plan.

Rehabilitation of Pasture Lands.

Since the Deccan Plateau and some districts in the North of Bombay State suffer chronically from famine and shortage of fodder, provision is made to improve the cutting Kurans and to improve the stock and quality of grass as well as to grow fodder trees in the same as a stand by in case the rains fail. The work intended to be carried out in these Kurans would be of the nature of staggered Contour-trenching, gully-plugging, if necessary and planting suitable fodder trees. Provision has been accordingly made in the Second Five Year-Plan to rehabilitate an approximate area of 52,768 acres at an estimated cost of Rs. 38·33 lakhs.

Soil Conservation.

There are vast areas of heavy rainfall in this State where, through past mismanagement the soil cover has completely disappeared. The notable example is the Ratnagiri District where heavy soil erosion is taking place and if immediate action is not taken, it would be reduced to a state of complete barrenness. Provision has, therefore, been made in the Plan to afforest about 3,340 acres and to acquire 26,742 acres of Malki land. The scheme also envisages creation of a Sub-Division for this area. A provision of Rs. 15 lakhs has been made for this Scheme.

Cutch Desert Scheme.

In order to prevent the spread of the desert in the northern part of the State it is proposed to take steps to immobilise the Runn of Cutch. The programme is expected to spread over seven years and to cost nearly Rs. 36·5 lakhs. During the period of the Second Five-Year Plan, provision for Rs. 8·71 lakhs has been made.

Land Improvement, Anti-erosion and Water Conservation Works in Dangs.

In order to prevent run-off of water in the catchment area of Dangs District which suffers during dry weather from acute scarcity of water despite heavy rainfall, provision is being made for trenching and gully plugging works.

Among the other schemes proposed in the Second Plan for forest improvement and rehabilitation may be mentioned the schemes for establishment of Soil Conservation Centres, at several places in the State, one arboreta at Dharwar, preparation of new Working Plans and revision of 19 Working Plans as also a Survey of the merged State areas in this State.

The Plan also provides for a comprehensive scheme at a cost of Rs. 6·40 lakhs for plantation of Agave hedges which would yield good fibre for rope and cords and Rs. 2·83 lakhs for intensification of lac cultivation in certain Districts. Provision is also being made for survey of oil seed bearing trees and for research in cultivation of medicinal plants which aspect of forest wealth had been neglected so far. In order to facilitate movement of timber it is proposed to construct an aerial ropeway in North Kanara District at a cost of Rs. 4 lakhs. In addition, a programme of Rs. 1,250 lakhs has been drawn up for improvement of Forest communications.

Steps will be taken to prevent illicit cutting by setting up additional check-nakas. A provision of Rs. 7·70 lakhs is also made in the Plan for installation of walkie-talkie wireless sets as a means of protection from fire and illicit cuttings.

In order to protect and as far as possible to increase the wild life which is on the verge of extinction, it is proposed to establish Game Sanctuaries in the State and a provision of Rs. 5 lakhs has been made for this purpose.

In order to improve the administration, particularly of the merged State areas, it is proposed to set up Training Classes in the three regions of Gujarat, Maharashtra and Karnatak where large number of forest subordinates below the rank of Ranger would receive training. A provision of Rs. 1,05,600 has been made in the Second Five-Year Plan for these Regional Forests Training Classes.

The creation of Village Woodlands and Improvement of Village Pasture lands are overdue but no steps have been taken so far. A beginning in this direction would be made in the areas covered by the Community Development Project and National Extension Service Blocks. A provision of Rs. 4 lakhs has been made in the Second Plan of the Forest Department in order to enable the Department to appoint additional staff for rendering technical help and guidance to the Community Development Projects and National Extension Service Blocks for the implementation of Schemes relating to Village Woodlands and grazing lands.

In regard to administration, an aggregate provision of Rs. 9·52 lakhs has been included in the Plan on account of reorganization and strengthening of certain forest divisions.

V

FISHERIES

The State has a coastline extending to about 800 miles. The continental shelf extending to about 100 fathom line is also fairly extensive. This wide seaboard is considered a rich source of fish-supply. The State has thus great potentialities for development of its marine fisheries. According to 1951-census, about 1,75,000 fishermen spread over 420 villages along the coast, are employed in fishing. In addition to this, the trade supports several other dependents and other subsidiary occupations. There are also a number of reservoirs and other sheets of fresh water in different parts of the State. Enrichment of fish fauna of these waters with better varieties will provide fresh fish to the population of the interior where supplies of sea-fish do not reach. Capture of fish depends largely on the gear and tackle used. This equipment and the methods of preservation, transport and disposal are antiquated. It is essential, therefore, to develop the industry on modern lines. The general trend of development of fisheries during the last decade was towards :—

(*a*) Provision of financial assistance to purchase new nets and boats ;

(*b*) Provision of motive power in the shape of engines on the indigenous fishing craft ;

(*c*) Provision of adequate refrigeration facilities to enable fishermen to store their fish in good condition in the midst of peak fishing season thereby making it possible for the release of fish to suit the demands of various consuming centres ;

(*d*) Improvement of quality of fish cured at the 36 fish-curing yards in the Kanara and Ratnagiri Districts by provision of cement-concrete platform, cement superstructures over such platforms, copious supply of fresh water, etc. ;

(*e*) Establishment of the Taraporevala Aquarium and Marine Biological Research Station ;

(*f*) Establishment of fisheries schools, which are classified as vocational primary schools. They lay stress on teaching subjects intimately related to fishermen's trade and environment, in addition to the subject taught in ordinary primary schools ;

(*g*) Stocking of fish under the scheme for development of inland fisheries ; and

(*h*) Establishment of fish-farms for observation on the feeding and breeding habits of fresh-water fish.

In the Second Five-Year Plan, a total provision of Rs. 76,37,000 is proposed on various schemes for the development of fisheries. Stress is laid chiefly on mechanization of fishing craft, for which a provision of Rs. 27,91,000 has been made. The target aimed at in this respect is about 1,000 mechanized craft at the end of the Second Five-Year Plan. However, mechanisation is not enough to obtain full benefits of modern fishing unless the possibility of mechanizing the methods of fishing are investigated and suitable methods are adopted. Accordingly, a provision has been made in the Plan for installation of winches, echo-sounders and training of fishermen in modern methods of fishing. The training thus imparted will help in the operation of new nets and procurement of larger quantities of fish from the sea. A provision of Rs. 10,00,000 for loans to fishermen to enable them to modernize their fishing methods has also been made.

In view of the extreme poverty and consequently slow progress of mechanization in the Kolaba, Kanara and Ratnagiri Districts, provision is made for one mechanized boat to demonstrate power fishing in these districts.

Since capture of fish during the monsoon is suspended throughout the coast because of the squally weather, provision for the construction of a specially designed fishing boat has been made in the Second Five-Year Plan. This boat will be operated departmentally in Co-operation with the fishermen and will demonstrate possibilities of fishing in the monsoon.

A scheme for establishment of a marine biological research station at Ratnagiri has also been included in the Second Five-Year Plan. Fisheries research, which could have a bearing on practical fishery problems, could not be conducted so far by the department for lack of adequate facilities in the shape of research vessel and requisite personnel at the Taraporevala Aquarium and Marine Biological Research Station. It has, therefore, been proposed to convert the vessel "Mysis" of the Fisheries Department into a research vessel and to strengthen the station with qualified technical staff so as to enable the department to conduct fisheries research, which would be of practical use for long-range development of fisheries in the State.

The Fisheries Technological Laboratory at Sassoon Dock, Bombay, has been engaged in production of different shark-liver oil products on a commercial scale. The activity has been successful as the laboratory has been working consistently at a profit to Government. With a view to introducing more palatable products, it is proposed to manufacture shark-liver oil with malt extract.

The scheme for stocking of inland waters with carp fry is to be carried forward in the Second Five-Year Plan as new tanks suitable for stocking have been located and it has been possible to stock several tanks in the State in Co-operation with the staff of the Community Development Projects and National Extension Service Areas. A new scheme to exploit fisheries in deep tanks has been started and will be intensified in the Second Five-Year Plan period the underlying idea being to increase the production of fresh-water fish in the State and to ascertain whether the carp fry such as Catla, Rohu, Mrigal, etc., breed in the streams adjoining the tanks.

A scheme for establishment of fish-farms at convenient centres in Poona, Nasik and some other districts has been proposed in the Second Five-Year Plan. The proposed farms will serve as ideal venues for demonstrating piscicultural practices to the people and also for providing units of nursery ponds for stocking multi-purpose reservoirs in the vicinity.

Along with the steps taken for enlarging output of fish, measures for their proper distribution are equally necessary. Accordingly, a scheme for marketing of fish in the interior consuming centres has been framed in the Second Five-Year Plan. The problem of preserving the fish during the transport over long distance and their storage at the markets has been tackled by the introduction of deep freezers which will be allotted to the societies on subsidy-*cum*-loan basis. Small ice and cold storage plants will also be established at important fishing centres and allotted to fishermen's Co-operative societies for operation.

Adequate steps for expeditious landing of fish and movement of fishing vessels to and fro fishing ports without any impediment, are necessary. Accordingly, provision of Rs. 6,00,000 has been made in the Second Five-Year Plan for improvement of landing and harbour facilities, cutting of obstructing rocks, removal of siltage and for installation of port lights. It is also proposed to improve existing facilities at a few of the fish curing yards.

A preliminary survey conducted by the Fisheries Department indicates absence of real pearl oysters in local waters. It is, however, proposed to investigate the possibility of cultivating real pearl oysters in the Okhamandal and Jaitapur areas. Accordingly, a scheme for the purpose involving a total expenditure of Rs. 56,000 has been included in the Second Five-Year Plan for experimental work.

Owing to demand from fishermen for the establishment of fisheries schools at different centres three more schools are proposed to be established during the Second Five-Year Plan period at a total cost of Rs. 3,34,000.

Provision for financial assistance in the form of loans to fishermen to purchase engines, ice factories, nets, boats or any other equipment is also made.

In order to implement the above programme in the Second Five-Year Plan it is necessary to strengthen the staff of the department. To implement the recommendations made from time to time by the Government of India and the Planning Commission in respect of collection of fish statistics, a provision of Rs. 2,80,000 has been made in the Plan for strengthening of the staff of the department including staff for collection of fish statistics.

The increased strength of the staff resulting out of these schemes will need larger accommodation. Similarly, extension of research facilities at Aquarium will also need larger accommodation. It is, therefore, proposed to put up an extension to the Taraporevala Aquarium building at a cost of Rs. 80,000.

At present there are no adequate arrangements to secure proper and timely repairs to the marine engines numbering 536 fitted to the fishing crafts in this State. Schemes such as training in improved methods of fishing and handling of marine engines are already in force but the fishermen have still to run to Bombay for major repairs. This results in suspension of their fishing for a number of days which causes considerable curtailment in production, as well as financial loss to fishermen themselves. To overcome this handicap, it is proposed to establish a service station at Satpati at a cost of Rs. 76,000. It is also proposed to establish a boat-building yard on Co-operative basis at Satpati, District Thana, to enable fishermen to procure boats at reasonable prices. The yard is estimated to cost rupees one lakh.

VI

COMMUNITY DEVELOPMENT PROJECTS AND NATIONAL EXTENSION SERVICE

OBJECTIVES

In October 1952 a nation-wide programme of rural development known as the Community Development Projects was initiated in the country for building up a new life and to create a new pattern of society in rural India. Later the programme of Community Projects was broadened in its application under the name of National Extension Service. Essentially the objectives of both these programmes are identical inasmuch as they seek to bring about a social change by arousing the enthusiasm of the rural people for a new way of life and to put an end to poverty and stagnation by initiating a process of growth in which every family in the village will be enabled to participate. As several aspects of rural life are inter-related, these programmes include measures for a rapid increase in food and agricultural production, promotion of education, improvement of health of the people and for the introduction of new skills and occupations.

In the past efforts were made to bring about improvement in rural areas through development departments such as, Agriculture, Animal Husbandry, Co-operation, Health, Education etc. These agencies, however, worked independently of one another, following their own programmes and carrying them out through their own hierarchies. The last official in each of these Departments had such a large area in his charge that the villagers hardly felt his presence. His activities were also not linked with those of revenue officers who touched the village life at many points. As a result, the efforts to improve village life lacked the necessary co-ordination and drive to change the outlook of the farmer and mobilise local initiative and resources for the betterment of rural conditions. The National Extension Service has been evolved to meet these requirements.

The inter-relation between the Community Development and National Extension Service Programmes needs to be explained. The National Extension Service is concerned as a permanent organisation to be extended to the whole State. It provides the basic organisation, official and non-official, and a minimum financial provision for development. National Extension Service Blocks in which successful results have been achieved with the maximum popular contribution are selected for intensive development for a period of three years. These are called " Community Projects ". In these, the works' programme is more comprehensive.

The Community Development and National Extension Service Programme seeks to bring about improvement and change the outlook in the following directions :—

(1) Increased employment and production.

(2) Organization of the community for co-operative effort.

(3) Organization of community effort for works of common benefit to the community.

PROGRESS UNDER THE FIRST FIVE-YEAR PLAN

The Community Development Programme was inaugurated in the Bombay State in October 1952 with four Community Development Projects each consisting of 3 blocks, and one Community Development Block. The programme was extended gradually so that by the end of the First Plan period the State had a total of 110 ½ Community Development and National Extension Service blocks covering an area of 27,085 square miles, in 8,894 villages and a total rural population of 72,12,780. This includes the Blocks started on 1st May 1956. Thus more than 1/5th of the State has already been covered by these programmes.

A total expenditure of nearly Rs. 3·27 crores was incurred on development in Community Development Project and National Extension Service areas in this State by the end of the First Plan period. The pace of progress during 1955-56 was greater than the average for the earlier years. One of the main reasons for this has been that in the first year and a half, time was spent in evolving suitable administrative and financial procedures, delegating powers, preparation of plans and estimates, securing of necessary staff, etc. As the Community Development work and financial and administrative procedures have been systematized and the people and officials have become conversant with the basic principles and concepts of Community Development, it has become possible to step up the pace of progress.

A brief account of the targets achieved during the First Plan period is given below :—

Improvements in agriculture were effected by various schemes of fertilizer and seed distribution, minor irrigation, land reclamation, etc. 6,83,403 Bengal maunds fertilizers were distributed and a total area of 8,26,953 acres was covered by improved seeds besides bringing an area of 32,571 acres under fruit and vegetable cultivation. 6,151 agricultural demonstration farms were started to propagate improved cultural practices. Through various minor irrigation works such as wells, tanks and bandharas an additional area of 83,929 acres was brought under irrigation and over 40,000 acres of land was reclaimed.

Veterinary facilities were expanded and nearly 22,64,494 cattle were inoculated and vaccinated and 6,78,149 cattle were treated. 85 additional artificial insemination centres were opened.

In the matter of rural health and sanitation the activities covered construction of latrines and drains, drinking wells and provision of other water supply schemes, opening of maternity homes and dispensaries etc. 7,784 rural latrines and about 1,96,863 yards of drains were constructed and 3,029 wells were constructed or repaired. Over 5,91,000 persons were treated at the various dispensaries and over 18,00,000 persons were vaccinated or re-vaccinated. Buildings for 28 dispensaries and 21 maternity homes were constructed. Nearly 5,658 village houses were constructed and another 5,287 houses were re-conditioned.

In the sphere of education the State Government has already gone ahead with its schemes of introduction of compulsory primary education in villages. In the Community Development Project and National Extension Service areas 974 primary school-buildings and 66 school rooms were constructed and 331 school-buildings and school rooms were repaired. 218 primary schools were converted into basic schools. With the help of over 4,300 adult education centres which were started 25,217 adults were made literate. Other activities conducted include starting of 1,898 Community Recreation centres, organisation of 1,290 youth clubs and 431 women's associations.

Village Communications have been improved by construction of and repairs to 4,309 miles of village roads and 332 culverts or causeways.

One hundred and twelve training centres were organized for training in rulral arts and crafts. These centres trained 1,354 persons and enabled 3,711 persons to secure additional employment during the Plan period.

The people's institutions have contributed greatly to the success of the Community Development and National Extension Service Programmes. In the areas covered by Community Development Projects and National Extension Service there were in this State 838 Village Panchayats and other statutory bodies in addition to 1,139 other voluntary organisations. As against the Government expenditure of Rs. 3·09 crores on the various activities mentioned above the people's contribution in labour, cash and kind amounted to Rs. 2·09 crores.

PROGRAMMES UNDER THE SECOND PLAN

The whole of the State will be covered by the National Extension Service during the Second Five-Year Plan period i.e. by 1961. During this period about 376 National Extension Service blocks will be taken up of which about 40 per cent. will be converted into Community Development Blocks

As regards training of the personnel, arrangements at the Extension Training Centres for the training of Gram Sevaks have already been made. At present there are three Extension Training Centres. Steps have been taken to start a fourth Centre and increase the capacities at the existing three centres. Arrangements for the training of Block Development Officers and Social Education organisers have also been made at the Block Development Officers' and Social Education Organisers' Training Centres set up by the Community Projects Administration.

The principal targets in physical terms are set out below :—

Agriculture.—About 2,60,000 tons of fertilisers will be distributed and a total area of 1,76,65,000 acres will be brought under improved seeds. In addition an area of 1,31,000 acres will be brought under fruit cultivation and an area of 1,74,000 acres will be brought under vegetables.

Minor irrigation works such as bandharas, wells and tanks will be undertaken as in the First Plan period. A total additional area of 3,00,000 acres is expected to be brought under irrigation by these measures. Besides this an additional area of 35,000 acres is proposed to be reclaimed by construction of bunds.

Animal Husbandry.—100 additional breeding and artificial insemination centres will be started. These centres and the centres already started during the First Plan period will be able to supply about 1,000 pedigree bulls to cultivators. The Veterinary facilities will be strengthened by opening of 40 more veterinary dispensaries.

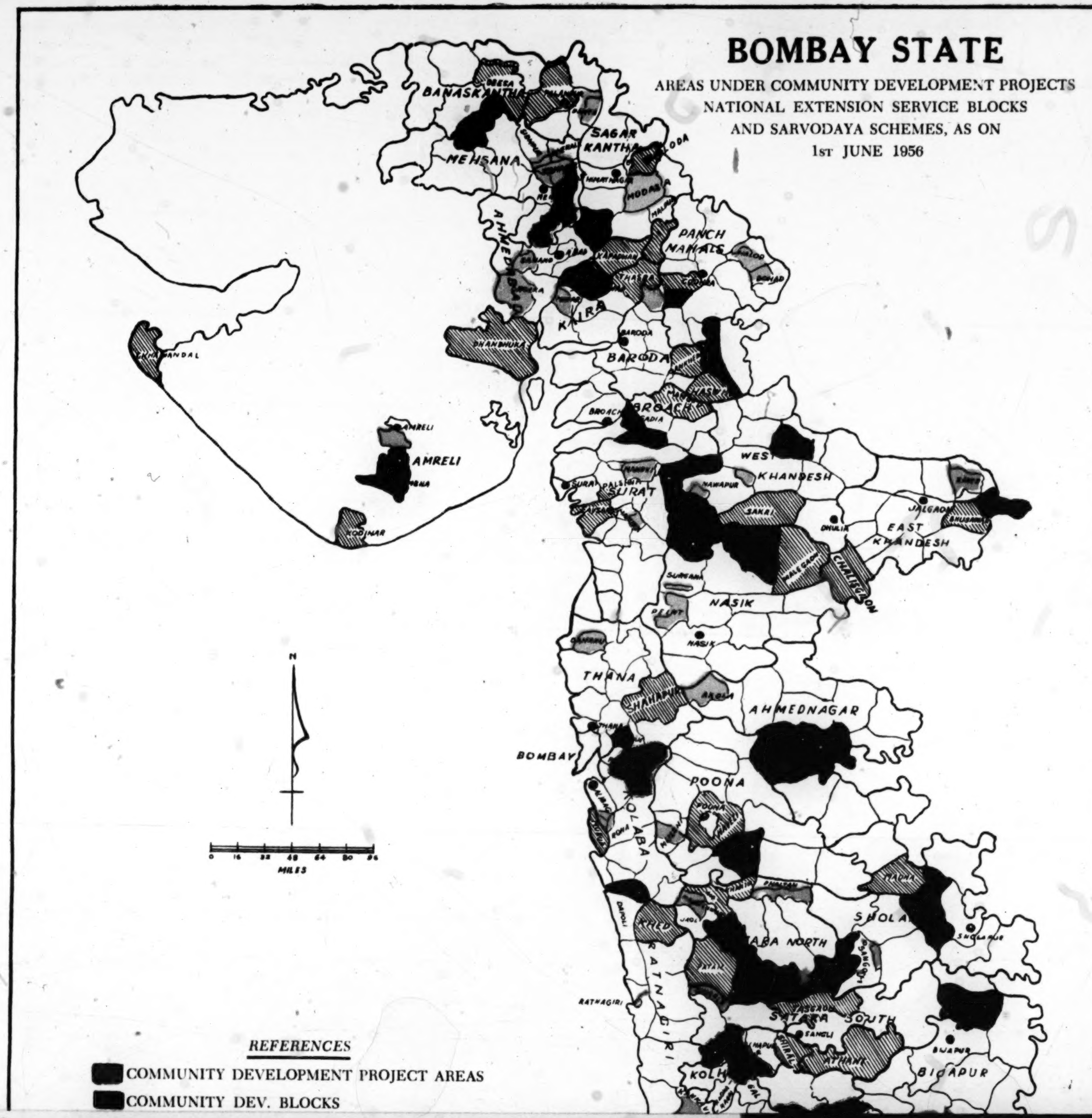
Health and Rural Sanitation.—About 10,500 rural latrines and 1,78,500 yards of drains will be constructed during the Second Plan period. In addition to the wells to be constructed from the provision of Rs. 1·20 crores made for village water supply schemes in the Health Programme of the State Government, it is proposed to construct about 4,000 new wells and also to take up 500 other schemes of rural water supply under the Community Development Projects and National Extension Service Programme.

Medical facilities will be expanded by opening 60 more dispensaries and 75 more maternity homes.

Education.—2,000 additional primary schools will be opened and 500 schools will be converted into basic schools during the Second Plan period. Nearly 5,000 school buildings and school rooms will be constructed.

BOMBAY STATE

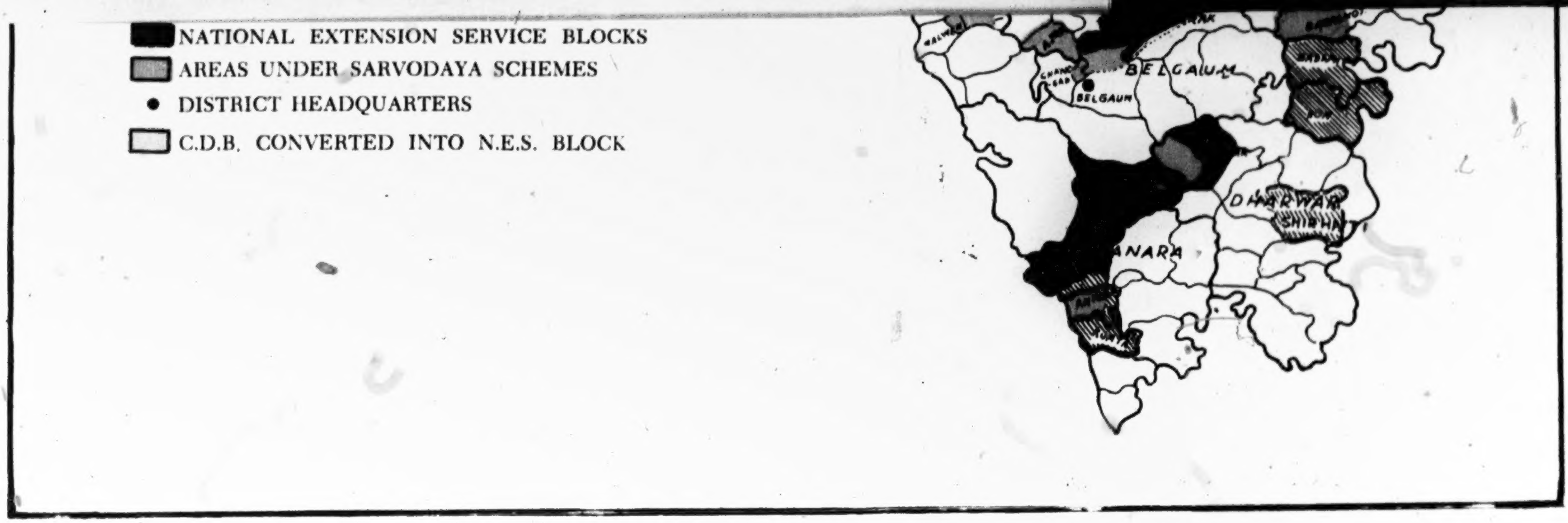
AREAS UNDER COMMUNITY DEVELOPMENT PROJECTS
NATIONAL EXTENSION SERVICE BLOCKS
AND SARVODAYA SCHEMES, AS ON
1st JUNE 1956



REFERENCES

▨ COMMUNITY DEVELOPMENT PROJECT AREAS

■ COMMUNITY DEV. BLOCKS


■ NATIONAL EXTENSION SERVICE BLOCKS
▨ AREAS UNDER SARVODAYA SCHEMES
● DISTRICT HEADQUARTERS
☐ C.D.B. CONVERTED INTO N.E.S. BLOCK
BELGAUM
CHAND-GAD
BELGAUM
DHARWAR
SHIGHN
ANARA

As many as 10,000 additional adult literacy centres will be opened and 1,000 libraries will be established. Other activities proposed to be undertaken in the Second Plan period include opening of 1,000 Community Recreation Centres, 1,200 women's associations or clubs, 3,000 youth clubs, 500 gymnasia, 5,000 children's organisations and 2,000 farmers' unions.

Communications.—The Road Development Programme in the State Plan includes a programme of Rs. 4 crores for Village Approach Roads. Under the Community Development Projects and National Extension Service Programme it is proposed to construct 3,035 miles of village roads, 200 miles of other District Roads and 2,500 culverts or causeways.

Cottage Industries.—Special emphasis has been laid on promotion of the growth of cottage industries in the State Plan. The programme under the Community Development Projects and National Extension Service envisages grant of assistance to 1,500 industrial co-operatives and 1,000 individual artisans and opening of 500 training centres and 100 production centres. Nearly 20,000 persons will be trained in rural arts and crafts during the Second Plan period.

Co-operation.—The co-operative effort in Community Development Project and National Extension Service areas is mainly directed towards organisation of multipurpose societies, lift irrigation and farming and housing societies. During the Second Plan period it is proposed to organize 5,000 co-operative societies of various types.

Rural Housing.—During the Second Plan period about 5,000 new houses or tenements will be constructed.

People's participation is of the greatest importance in the Community Development Programme. Their response may vary from place to place and from activity to activity. Consequently, the actual achievements of various targets mentioned above will vary in accordance with the direction and extent of people's co-operation.

VII

RURAL DEVELOPMENT

For the all round development of rural areas specific schemes have been undertaken by the Government of Bombay. Liberal grants are placed at the disposal of the various District Development Boards and the Collectors of the Districts for undertaking works which benefit the villages e.g., roads, wells, agricultural cattle shows, van mahotsava, etc. Among the important rural development programmes may be mentioned :—

(*i*) Sarvodaya Scheme,

(*ii*) Local Development Works Programme, and

(*iii*) Development of Village Panchayats.

In addition there are the Community Development Projects and National Extension Service which are dealt with separately.

SARVODAYA

A programme of all round developments, social and economic, of compact groups of villages commonly known as Sarvodaya was launched in this State in 1949. This programme is extensive and covers schemes relating to education, agriculture, village industries, health, sanitation, social amenities and social welfare. Compact blocks of 30 to 45 villages having more or less homogeneous social and economic conditions and inhabited largely by backward classes or where the local rural economy is of a backward type are selected for Sarvodaya development. 29 such Sarvodaya Centres have been functioning in the various selected areas in this State. On an average each Sarvodaya Centre gets a grant of about Rs. 60,000 to Rs. 70,000 for undertaking development work in the respective sarvodaya compact areas. The activities undertaken vary from centre to centre depending on the needs of the people and the extent of voluntary effort on the part of the people themselves. The Sarvodaya Centres have made the people aware of the need to stand on their own legs and have taught them self-help and co-operation. The programme of Sarvodaya development will be continued in the Second Five-Year Plan period for which a provision of Rs. 85 lakhs has been made.

LOCAL DEVELOPMENT WORKS

With a view to create interest on the part of as wide a section of the community as possible and to draw forth local initiative and resources of the people a programme of local development works was launched by the Government of India during the year 1953-54 under the First Five-Year Plan, in order to give benefit to those parts of the country which do not stand to benefit directly from schemes already included in the Five-Year Plan. The main principles underlying the programme of local works are (1) the sum provided by the Central Government should be supplemented by sums provided by State Governments by local bodies and by the people (2) 50 per cent of the cost of the scheme should, as a rule, be contributed by the public in the form of cash, materials or labour, the rate of contribution however being low in the case of works in areas where the people are backward and/or poor, and (3) schemes involving little or no recurring expenditure benefiting rural areas costing Rs. 5,000 to Rs. 40,000 should be taken up under the programme. The following are the categories of works most suitable for assistance from the Government of India under the Local Development Works Programme :—

(1) drinking water supply schemes ;

(2) permanent works for improvement of agriculture ;

(3) permanent works for improvement of rural sanitation ;

(4) village roads including small bridges and culverts ;

(5) improvement to school or dispensary buildings where such institutions already exist and are inadequately housed ;

(6) construction of godowns for storage of goods provided the benefit accrues to the public generally.

In the year 1953-54, a programme of local development works costing Rs. 75 lakhs was accordingly undertaken in this State, the share of the Government of India being Rs. 25 lakhs, share of the State Government Rs. 12 1/2 lakhs and local contribution Rs. 37 1/2 lakhs. In the year 1954-55, the total programme was of the order of Rs. 150 lakhs, Central and State share being Rs. 59·20 lakhs and Rs. 25 lakhs respectively. In the year 1955-56 a programme of equal magnitude was targetted. It will thus be seen that the response received from the public is very encouraging as contribution was received not only in cash but also in materials, supplies, labour etc. In areas where the people are poor and/or backward, contribution was accepted at a low rate and people came forward to work with reduced wages, such reduction being treated as contribution.

In view of the enthusiasm received from the public it is proposed to undertake a total programme of Rs. 8 crores during the Second Five-Year Plan period out of which the share of the Central Government will be Rs. 4 crores and an equivalent amount by way of contribution from the local bodies and from the people is expected. A provision of Rs. 40 lakhs is made in the State Plan to cover the cost of administrative and technical staff required for the implementation of this programme and to make up any deficiency of popular-*cum*-local body contribution in certain backward areas.

VILLAGE PANCHAYATS

A prominent place has been given in the Plan for the development of Village Panchayats. While the several schemes for public participation in the First Five-Year Plan, have already brought forth local initiative and voluntary contributions from a large number of Village Panchayats it has been found that with the meagre resources of the Panchayats it is difficult for these bodies to play an effective role in the implementation of the Plan in so far as rural areas are concerned. The Panchayat is the agency for village planning and the basic unit for the development of the Community at the village level. This is a major role which the Village Panchayats have to play and increasingly so during the Second Five-Year Plan period. The Government of Bombay has, therefore, decided to establish a village panchayat in every village in the State within a period of three years from 1955-56. Accordingly 1/3 of the villages in the State which were without Panchayats will have Panchayats at the end of March 1956. The remaining 2/3 of such villages will be covered during the first two years of the Second Five-Year Plan period. It is estimated that by the end of the year 1955-1956 the total number of Village Panchayats established in the whole State would have reached the figure of 9860. When the proposed scheme of establishment of village panchayats is fully implemented there will be about 17,400 Village Panchayats in the State. In order to promote the growth of village panchayats and to enable the existing panchayats to become efficient instruments of village development and planning the present rate of grants to Panchayats which is 25 per cent. of Land Revenue will be increased to a lump sum grant at 30 per cent. of Land Revenue. In Backward and Adiwasi areas where the people are too poor and illiterate and the agricultural assessment is consequently very low liberal grants will be given in excess of 30 per cent. Land Revenue. In addition a grant at 5 per cent. of Land Revenue will be paid to the District Local Boards for a period of five years from 1955-1956, as by that time the Panchayats in all the villages will have attained adequate stability. A provision of nearly by Rs. 4·08 crores has been included in the State Plan for these schemes.

VIII

CO-OPERATION

The development programme for Co-operation under the First Five Year Plan for Bombay State aimed primarily at promoting Co-operative effort among agriculturists through improved credit and marketing facilities, organisation of better farming societies and lift irrigation societies, regulation of money lending and provision of relief to agriculturists by scaling down their debts. The first plan provided an outlay of Rs. 1·23 crores for these schemes. In the Rural Credit Survey Report the Committee of Direction has pointed out that the essence of the solution to the co-operators' problems is State partnership including financial partnership. This financial help has to be substantial if it is to be effective.

Many of the individual recommendations of the Rural Credit Survey already find a place in the Co-operative movement as it has developed in this State in the past and more particularly in the First Plan period. Nevertheless much remains to be done if what has been achieved is viewed in the perspective of the integrated approach to the problem which is recommended by the Rural Credit Survey. So far as the Co-operative Movement is concerned, the main lines of re-organisation and development recommended by the Rural Credit Survey are:—

(*i*) Financial, administrative and technical strengthening of Co-operative Credit Institutions at all levels.

(*ii*) The progressive organisation on a co-operative basis of Marketing and Processing with the needed financial, administrative and technical assistance from the State.

(*iii*) The progressive organisation on a co-operative basis of as large a sector of rural economic activity as possible with the financial, administrative and technical assistance from the State.

(*iv*) The organisation of an adequate system of training for the personnel that would be required both in the Co-operative Department and Co-operative Institutions envisaged under the abovementioned objectives.

The major portion of the Co-operative Plan that has been drawn up relates to the implementation of the above recommendations. The various schemes included in the Second Plan are discussed below:

Credit Schemes.—Extension of Rural Credit is expected to cost Rs. 85·81 lakhs (exclusive of Rs. 400 lakhs to be received from the Reserve Bank of India for participation in the share capital of the credit institutions at various levels) and is calculated to bring about the requisite strengthening of the Co-operative Credit Institutions to enable them to play their role in the matter of provision of agricultural credit short-term, medium-term and long-term, to an adequate extent.

A related scheme is that of organisation of Grain Depots, expected to cost over the period of the Plan a sum of Rs. 12·50 lakhs. This Scheme is intended to give subsistence loans in the form of grain to backward class land-less labour during spells of unemployment in between agricultural operations during the cultivating seasons.

A provision of Rs. 11·17 lakhs is sought to be made for the scheme of Co-operative Fisheries which is intened to develop the existing societies and to organise new ones during Second Five Year Plan period in such a way that they will serve as effective credit agencies to fishermen for their short-term and long-term credit requirements relating to construction or repairs of fishing boats and knitting or repairs of fishing nets. The scheme also envisages assistance to these societies towards their management expenses in the initial years.

Agricultural Marketing.—In order to provide protection to the agricultural producer from the risk of malpractices in marketing his produce and in particular to help the development and smooth functioning of Co-operative Marketing Societies, the programme of regulation of markets will be extended so as to cover all the major and minor markets in the State which would come within the scope of Market Regulation. The Scheme is expected to cost Rs. 81·45 lakhs.

In addition a provision of Rs. 161·06 lakhs has been included in the Plan for strengthening of Co-operative Marketing Institutions at all levels and for establishment of an effective link between the Primary Credit Institutions and Marketing Societies. An important feature of the scheme is the provision of godowns for the storage of produce. About 30 per cent. of the marketable surplus of agricultural produce will be brought within the scope of Co-operative Marketing.

A provision of Rs. 50 lakhs has been made for participating in the share capital of the State Ware Housing Company, which will be established at the State level in accordance with the recommendations of the Rural Credit Survey.

A related scheme is that of "Grading" under which it is proposed to extend the provision of grading facilities. The scheme envisages the establishment of three well equipped laboratories under efficient and technically trained staff for grading Ghee, edible Oils, etc., in 3 selected centres in the State at an estimated cost of Rs. 1·63 lakhs, which includes a provision for Rs. 0·43 lakh for staff.

The Scheme for Marketing Survey and Research, which has been in operation in this State since 1935 will be intensified during the Second Five Year Plan by provision of suitable additional staff. A scheme of 'Co-operated Market News Service' has been drawn up in addition.

In the matter of processing of agricultural produce this State has made some progress. It is, however, proposed to propagate this activity further by organising a number of co-operative processing societies for processing cotton chillies and isubgul, and preservation and canning of fruits and vegetables. The Scheme envisages the ensuring of the financial strength of these societies by Government participating in their share capital to the extent of 50 per cent. in the case of the processing societies and giving loans and subsidies in the case of the Canning Societies. Subsidies on prescribed scales towards management costs in the initial years are also contemplated.

The most ambitious among the processing schemes is the one relating to organisation of Co-operative Sugar Factories. This State has already some experience of manufacture of Sugar by Co-operatives of the sugarcane growers themselves and it is proposed to take advantage of this and also the special advantages, which cultivation of sugarcane has in the State of Bombay to organise 5 more such factories to be run by co-operatives of the cane cultivators. The Scheme envisages substantial loans to the societies from the Industrial Finance Corporation towards their capital expenses and Government contributions in their share capital to a specified extent. The total cost of the various schemes for Processing Societies and Co-operative Sugar Factories is estimated at Rs. 101·57 lakhs.

Rural Economic Activities.—In the field of organisation of rural economic activities on a Co-operative basis, the State has already made some advance in Co-operative Farming, Co-operative Lift Irrigation and Co-operative Milk Production and Distribution. It is proposed to consolidate and continue these activities during the Second Five Year Plan. A provision of nearly Rs. 46·50 lakhs is being made in the Plan for organisation and grant of assistance to Co-operative Farming Societies. The scheme also provides for the intensive development of a few selected co-operative farming societies by means of additional loans assistance and provision of better management facilities.

25 more Co-operative Lift Irrigation Societies will be organised during the Second Plan period.

In the matter of milk supply considerable expansion is contemplated by giving loans and subsidies including subsidy assistance towards initial management cost. About 8 new Milk Supply Unions and 4 Federations are expected to be functioning by the end of the Second Five Year Plan period with 80 Feeder Societies linked to them on the basis of 5 Feeder per union, and 10 per each Federation. These new societies are expected to handle about 23 million pounds of milk every year.

A new Scheme in the field of Rural Economic Activity on Co-operative basis relates to encouraging societies formed for the purpose of production of electricity primarily for urban uses, to undertake extension for supplying motive power to nearby agricultural users.

Another Scheme in the same field, but with the accent more on the aspect of colonisation relates to settlement of nomadic cattle breeders. These cattle breeders having no lands of their own, have perforce to move from place to place with their cattle for grazing purposes and this becomes a nuisance to the settled cultivators. A Scheme has already been sanctioned to enable such breeders to carry on their breeding activities without having to move from place to place, and is in operation during the current year. It is proposed to extend this scheme during the Second Five Year Plan and also to organise such other kinds of societies as will cater to the needs of these people after their settlement.

Co-operative Training and Propaganda.—In pursuance of the recommendations of the Rural Credit Survey, a comprehensive scheme for training has been drawn up which should make available persons of the right kind to man the posts in the Co-operative Department, as well as, under the various Co-operative Institutions that will be established. The Scheme also includes a provision for propaganda. The cost of the Scheme is expected to be Rs. 39·00 lakhs during the Plan period.

Administration.—It has been felt that to sustain Co-operative activity of the order envisaged in the various schemes, the department will have to be considerably strengthened particularly at the district level. The additional cost of expansion and re-organisation of the staff at various levels is expected to be Rs. 15·04 lakhs. The statistical section of the Department has also to be strengthened at a cost of Rs. 4·65 lakhs. The machinery for administration of the Money Lenders Act is proposed to be reorganised, at a cost of Rs. 8·15 lakhs over the five years of the Plan.

All the above schmes take into account the recommendations of the Rural Credit Survey. Together with a povision of Rs. 30 lakhs over the Five Year period as the State Government's contribution to the Relief and Guarantee Fund, which will be credited in accordunce with the recommendations of the Committee of Direction to absorb losses arising out of the higher tempo of credit activity the above schmes will cost Rs. 7·42 crores in the aggregate as shown below (exclusive of Rs. 4·00 crores that will come from the Reserve Bank of India for participation in the share capital of credit institutions) :—

	Rs. in crores.
1. Contribution to share capital	1·90
2. Loans	3·11
3. Subsidy towards capital cost	0·69
4. Recurring subsidies and grants	1·06
5. Staff	0·66
Total ...	7·42

Out of the amount required for share capital contribution, half the amount is expected to be forth coming from the Government of India. Similarly half the loan amounts are expected to come from the Government of India. In the amounts required for subsidies towards capital cost as well as recurring subsidies the Government of India is expected to contribute to the extent of 50 per cent. The cost on account of staff has been taken to be the responsibility of the State Governmet. The cost of the schemes to the state Government thus comes to Rs. 3·99 crores made up as under :—

	Rs. in crores.
1. Staff	0·64
2. Contribution to share capital	0·95
3. Loans	1·56
4. Subsidies towards capital cost	0·34
5. Recurring subsidies and grants	0·53
Total ...	4·17

Another major component of the Co-operation Plan relates to the two Housing Schemes sponsored by the Government of India. The Scheme relating to the "Low Income Group Housing through Co-operative Societies" is expected to cost Rs. 1·47 crores over the Plan period and the Scheme of "Subsidised Industrial Housing through Co-operative Societies" is expected to cost Rs. 35·40 lakhs. Only that portion of the cost which relates to additional staff to be engaged by the State Government, *viz.*, Rs. 2·31 lakhs under both schemes will be borne by the State Government and the balance of the funds will be forthcoming from the Government of India.

Another scheme under Co-operative Housing is the strengthening of the share capital of the State Housing Finance Society which has been already established for financing Co-operative Housing Societies part of the investment in the share capital of the Society has been already done, and the balance remaining to be invested *viz.*, Rs. 16 lakhs has been included in the Plan.

The primary objective of the schemes included in the Co-operation Plan is, to use the words of the Rural Credit Survey Committee, "the creation of conditions in which co-operative and other institution will function effectively in the interests of rural production and for the benefit of the rural producer and not as hereto be largely stultified by the operation of more powerful vested interests".

IX

DEVELOPMENT OF PARKS AND GARDENS

With a view to providing the public with the amenity of national parks and gardens a Department of Parks and Gardens has been established in this State. The Department is in charge of schemes for laying national parks and gardens at various places in the State. The organisation also gives advice to people in the lay-outs and maintenance of gardens. It also undertakes survey work for selection of suitable sites for laying out parks and gardens. During the First Plan period, a National Park at the Kanheri Caves near Borivali in Greater Bombay was laid out. Similarly, gardens were also laid out at Bombay, Poona, Baroda, Kolhapur, Chhota-Udepur, Dharampur, Himatnagar, Sangli, Panhala near Kolhapur and Akkalkot. A training class for Malis (gardeners) was also conducted. Most of the gardens have now been handed over to the local bodies or the Public Works Department for maintenance.

During the Second Plan period, work on the above lines is proposed to be continued. In addition, the following specific schemes will be undertaken.

(*i*) Development of landscape around hot water springs at Vajreshwari and Unai,

(*ii*) Establishment of National Parks at Elephanta Island and Sinhagad Fort,

(*iii*) Development of Sayaji Bag at Baroda, and

(*iv*) Establishment of a Central Nursery at the University Park, Poona and Regional Nurseries at Himatnagar and Kolhapur. A total provision of Rs. 21·57 lakhs has been made in the Second Plan for these schemes.

BOMBAY STATE

CO-OPERATION

Number of Members and Working Capital (in '000 Rs.)

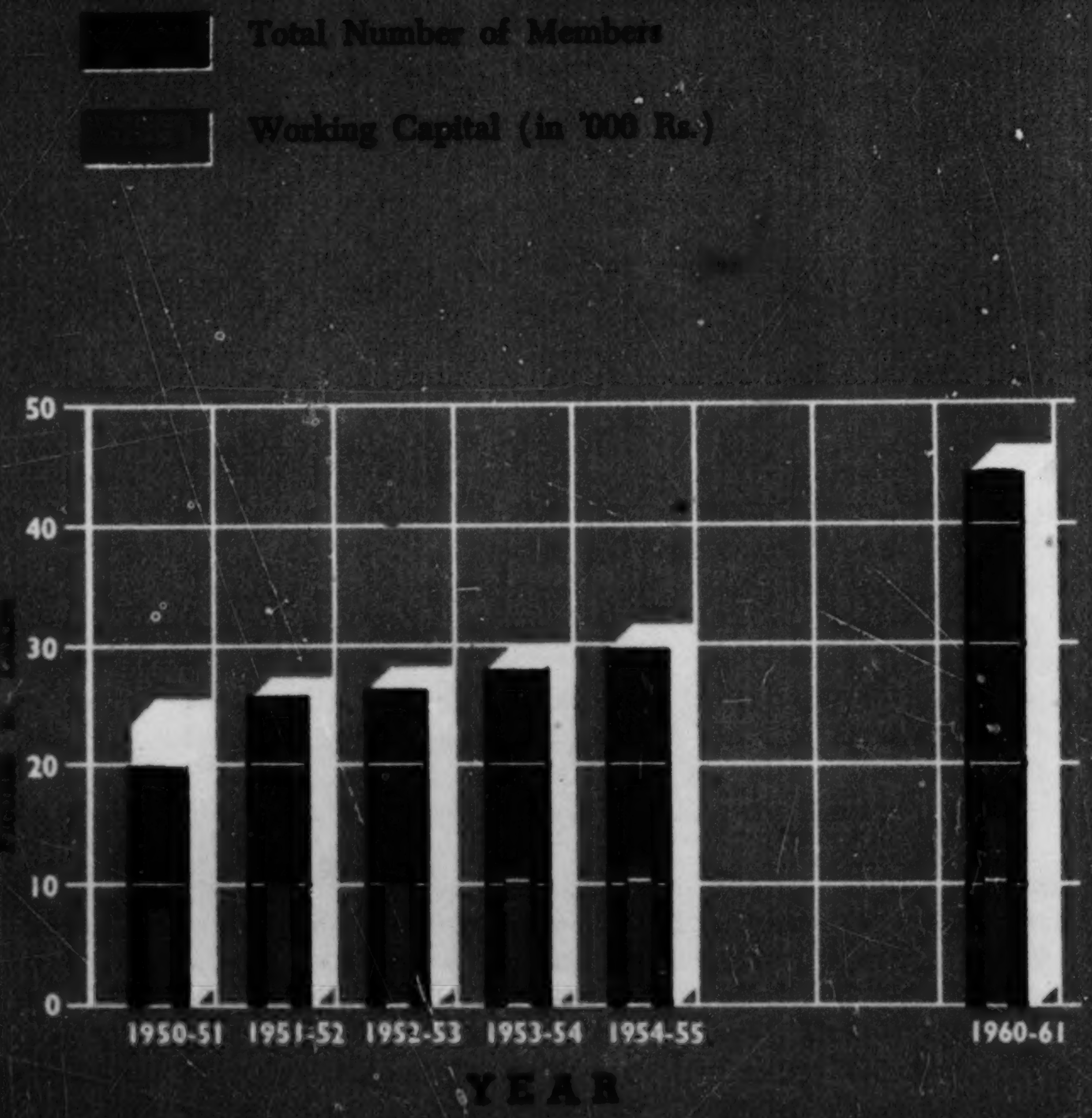


PLATE II

CHAPTER V

IRRIGATION AND POWER

MULTI PURPOSE PROJECTS

The following two projects are propsed to be take-up as multi-purpose projects under the Second Five-Year Plan :—

Name of the Project	Five-Year Cost (Rs. in crores)
1. Koyna Project—	
(*a*) Koyna Project Stage I carried over from the First Plan	29·00
(*b*) Extnesion to Sholapur, Sangli, Miraj, etc. ...	3·00
2. Ukai Project	7·50
Total ...	39·50

KOYNA PROJECT—FIRST STAGE

The first stage of this project estimated to cost Rs. 3321·67 lakhs was included in the First FiveYear Plan as a power project and construction was started in January 1954. As per present construction programme, a major portion of the work is expected to be completed by June 1961.

The works are situated in the Helwak-Pophali area by the side of the Karad-Chiplun road about 160 miles to the south of Bombay as the crow flies. The site is approachable by rail *via* Karad on the Poona-Bangalore Section of the Southern Railway or by sea *via* Dabhol Port on the Western Coast.

Rising on the Western Slopes of the Mahableshwar Plateau in the Western Ghats of Bombay State the Koyna river offers one of the most attractive sites available for development of cheap hydro-electric power and for providng storage for irrigation. The Eastern foot of the Ghats which is located North-South is at an elevation of 1,000 to 2,000 feet above mean sea level. The Western face of the Ghats has steep slopes ending at the ground level of about 500 feet. This drop of about 1,500 between the two sides of the Ghats together with a catchment area of 346 sq. miles receiving an average annual rainfall of over 200 inches in the Koyna Valley provides a high potential for a hydro-electric scheme at a moderate cost. The average yield available from the catchment area is of the order of 1,40,000 m. cft. but according to the decision arrived at in the inter-State conference in 1951 only 67,500 m. cft. of this water is allowed to be diverted to the West of the Ghats for power generation and this has limited the scope of the project. This diversion will be effected in two stages. The first stage now taken up provides for a storage of 36,045 m. cft. obtained by constructing a dam of about 207.5 ft. above the river bed. All this storage will be utilised for power generation of about 2,40,000 kwts. as described below.

Bombay, the premier city in India, has overgrown its pre-war capacity in population and industrialisation. The power shortage in this highly industrialised area has become extremely acute during the last two years and immediate measures are needed to remedy the situation. The first stage of this project offers a suitable source of power which can supply the needs at a reasonably low cost and in a progressively expanding measure. The rural areas of the Bombay State are also awake to regional industrialisation and are clamouring for cheap power.

Certain areas in the Southern part of the State are periodically famine stricken owing to frequent failure of monsoons. These areas need an assured supply of water for irrigation and cheap power for lift-irrigation. These needs will be met with in the second and third stages of this project.

Though the preliminary surveys and investigations were taken up in 1946 the actual construction work was started in January 1954, and preliminary works like buildings, roads, water supply and drainage, electric power supply for constructional purposes, acquisition of machinery and such other works are in progress. Excavation in overburden for the foundation of the dam has also been taken up. The construction of the dam and the underground works will be taken up soon.

By the end of the First Five-Year Plan it is estimated that about Rs, 4 crores will have been spent out of the total estimated amount of 33·22 crores.

The first stage of the project which has been included in the Second Five-Year Plan may be outlined as below :—

The first stage aims at enough storage to neable installation of four effective machines of 60,000 kwts. at 60 per cent. load factor each. This power will be utilised principally in the Bombay area and only about 10,000 kwts. in the Maharashtra districts adjoining the project site. All under-water installations and other works which will become inaccessible have, however, been designed to fit the final development. Necessary sluices have also been provided for irrigation in the second stage and hydro-electric pipes for seasonal power in the third stage.

The water storage is obtained by a composite dam with concrete in the central portion and masonry over concrete foundations as may be found suitable in the flanks, and the necessary appurtenances.

The dam in the first stage will be nearly 207·5 ft. above the river bed and 265 ft. above the foundations at the deepest section.

Water for power generation will be carried by a head race tunnel, 21 ft. diameter concrete lined, about 1,200 ft. long with the necessary intake channel and works, and terminating in a surge shaft thence, through steel lined 10 ft./8ft. 6 inches diameter pressure shafts driven through rock, each shaft to serve two machines, of 60,000 kw. each through 75" Penstock lines.

The power house is located underground and so is the transformer hall, the valve house excess being provided through an appraoch tunnel. The tail water will be discharged into Vashisti river through a free flow concrete lined tunnel, 24 ft. a hourse-shoe and about 6,700 ft. long. Necessary cable tunnels, ventilation shafts and switchyard etc., will also be provided.

At Bombay, the Koyna Power System will be tied into the existing Tata-Central Railway inter-connected system including the Bombay Government Steam Plant at Chola. As hydro power from the Koyna Project becomes progressively available, thermal plant of equal capcity is proposed to be withdrawn from service. The thermal plant will however be maintained in addition for use and meeting conditions of monsoons failure, drought and similar other unpredictable occurrences. In Maharashtra, the small grid is expected to be the forerunner of industrial development of that region.

For the purposes of assessing the financial returns, an average of 0·4 annas per kwt. has been assumed as a reasonable rate. Based on this rate the scheme will show profit from the third year of operation and yield a return of about 5½ per cent. on the invested capital from about the sixth year of service.

More power will be made available in the later stages of the Koyna development briefly indicated below, which will, however, be taken up as the demand for power develops.

KOYNA PROJECT—SECOND STAGE

Widening and raising of the dam to final section and to a full height of 270 ft. above the river bed so as to store 97,500 m. cft. to permit full utilisation of 67,500 m. cft. net for power generation and 28,000 m. cft. for irrigation supplies. The generating capaicty will be increased to 4,10,000 kwts. This increased supply will be made available to the Maharashtra and Karnatak areas for rural electrification and industrialisation and lift-irrigation purposes and also for meeting further demands of the Bombay area.

KOYNA PROJECT—THIRD STAGE

Installation of tail race underground power house with necessary conduits and tail race and also the installation of power house at the foot of the dam in order to utilise the irrigation water for seasonal power generation. The power derivable from the tail race plant would be about 60,000 kwt. and that from the plant at the toe of the dam about 30,000 kw. seasonal, i.e., 5,00,000 kw. in all. This additional power will be utilised to meet the additional demands as and when they arise.

A provision of Rs. 29 crores has been made in the Second Five-Year Plan for completion of stage I of the Koyna Project.

KOYNA-SHOLAPUR TRANSMISSION SCHEME

The Bombay State roughly comprises the following three zones :—

(*i*) Northern zone including towns of Surat, Baroda, Ahmedabad, etc.

(*ii*) Central zone including Bombay, Sholapur, Poona, Satara, Nasik, Jalgaon, Bhusawal, Belgaum, Kolhapur, etc., and

(*iii*) Southern zone including Hubli, Dharwar, Gadag, etc.

The Central zone is proposed to be supplied with Hydro-Electric Power in the Second Five-Year Plan. The Jalgaon and Bhusawal areas are proposed to be covered separately by the Ukai-Khandesh Scheme. Bombay City and surrounding areas upto Poona and Igatpuri are already served by the Tata-Chola network. The Koyna Project is under construction and the first stage of the Project will serve the needs of additional power at Bombay and the undeveloped areas of Karad, Sangli, etc. It is proposed to take up a further scheme, Koyna-Sholapur Scheme in the Second Five-Year Plan to cover a part of the Central Zone. This Scheme is estimated to cost Rs. 748·1 lakhs and will distribute power to industrial and rural area of North Satara, South Satara, Sholapur, Kolhapur, Kolaba and Nasik Districts. The Scheme is divided into 3 zones, viz. (*i*) Sholapur-Satara, Sangli-Miraj, etc., (2) Koloba District, and (3) Nasik-Manmad.

Part I.—Under this part it is proposed to purchase power from Koyna Power Station at 220 KV. It consists of 40 miles of 220 KV. single circuit line from Koyna Power House to Karad, 40 miles of 110 KV. single circuit line connecting Karad and Vishram Baug, 40 miles of 110 KV. single circuit line connecting Karad and Satara Road, 126 miles of 110 KV. double circuit line connecting Karad with Sholapur via Pandharpur. In addition to this main transmission lines of about 250 miles of 33 KV., 22 KV. and 11 KV. lines will also be provided under this scheme. The total cost of this part of the scheme is estimated to cost Rs. 589 lakhs.

Part II.—Electrification of Kolaba District.—Under this part, power will be purchased from Tata Hydro system at two places, viz. (*i*) Bhira Power House and (*ii*) Panvel Sub-Station. At Bhira Power House power will be purchased at 11 KV. voltage. The voltage will then be stepped up to 22 KV. and 22 KV. lines will then be taken to feed Kolad, Roha, Nagothana, Mangaon, Mhasala, etc. At Panvel Sub-Station power is available at 22 KV. From Panvel Sub-Station 22 KV. lines will be taken to feed Uran, Pen, Alibag, Matheran, Neral, etc.

Part III.—Electrification of Nasik and Manmad.—Part III consists of giving power supply to Nasik and Manmad. In the Second Five-Year Plan, it is felt that the Railways will be constructing 100 KV. lines from Igatpuri to Bhusawal. Under this part it is proposed to tap the proposed 100 KV. lines of the Railways at Nasik and Manmad and to supply local loads and the rural loads at these two towns. About 5,000 KW. of power will be tapped from the Railways network and in exchange about 5,000 KW. of power will be supplied to Railways from the network on Ukai-Khandesh Scheme at Jalgaon and Chalisgaon.

A provision of Rs. 3 crores only is made in the Second Five-Year Plan. Within this provision it will be possible to undertake some work of extension under Part I of the above scheme. The work under Parts II and III will have to be postponed to the Third Plan period.

UKAI PROJECT

The Project envisages the construction of a reservoir across Tapi river at Ukai in Surat District. A major part of the lower Tapi Valley Scheme (Stage I), viz., the Kakrapar Weir and Canal Project, is already under execution under the First Five-Year Plan. The Ukai Project benefits the areas of Surat District, which has a rainfall of 30·52″ and is affected by scarcity. The percentage of irrigated to sown area is 0·4 per cent. The Ukai Project will provide storage to the Kakrapar canals system, provide electricity to South Gujerat and eastern part of Maharashtra, i.e.

Districts of Nasik, West Khandesh, East Khandesh and Ahmednagar and serve as flood control work. The project provides irrigation for 3,91,650 acres for mixed crops or 6,14,000 acres of seasonal crops. The project has a storage of 2·66 lakhs M. Cft. The cost per M. Cft. of storage comes to Rs. 1,062, and the cost per acre of irrigated areas comes to Rs. 587 (for mixed crop) and Rs. 375 (for seasonal crop). A provision of Rs. 7·5 crores has been made in the Second Five-Year Plan for the Irrigation part of the Project.

The East and West Khandesh area of Bombay State is potentially rich in raw materials for the development of industries. But this area has remained undeveloped due to several factors, the main factor being the absence of cheap electric power. The Ukai dam site on the Tapi river 30 miles to the West of the border of West Khandesh District has great potentialities for the development of cheap and economical hydro-electric power. It is 70 miles to the East of Surat. The Government of India at the instance of the Government of Bombay have already investigated the hydro-electric potential of the river and have advised that it is possible to generate economically about 110 MW of firm power at 60 per cent. load factor. The load of East and West Khandesh is of the order of 25 MW (in 1966-67) and this load is within the economic distance of transmission from the Ukai dam site. It is by itself not sufficient to justify the development of a major hydro station of 110 MW firm capacity. However, there is enough load in the Northern Zone around Surat, Baroda and Ahmedabad to consume the balance of power available at Ukai. Moreover the Central Railways also need some power for their proposed electrification of Bhusawal-Igatpuri Section. It is proposed that about 5 MW will be given to Railways at Chalisgaon and Jalgaon. It is, therefore, expected that the full power output from Ukai will be utilised by 1966-67. The Bombay Electricity Board has a thermal station at Utran near Surat on the Tapi to meet the load requirements of South Gujarat and also there is the steam station of Ahmedabad Electricity Company at Sabarmati serving Ahmedabad and the area called the North Gujarat, i.e. from Ahmedabad to Baroda. These stations will serve to firm up the hydro capacity of Ukai and the combination will be ideal for meeting the load requirements of the area. The present project envisages the development of the Ukai Hydro-Electric project for the generation and transmission of cheap hydro-electric power to the large industrial towns of Dhulia, Jalgaon, Bhusawal and inter-connection with the Board's power station at Utran and with the Ahmedabad Electric Supply Company's station at Sabarmati.

The total estimated capital cost of the project chargeable to power generation has been taken as Rs. 28,38·4 lakhs. This is based on the assumption that 30 per cent. of the total cost of the storage works is chargeable to power generation.

Of the 110 MW available at Ukai by 1966-67, it is proposed to distribute as follows :—

(1) Ahmedabad Licensee ...	20 MW	
(2) North and South Gujarat Areas.	50 MW	
(3) Central Railways ...	5 MW	(in return for the 5 MW proposed to be bought from the Railways at Nasik and Manmad from their proposed Igatpuri-Bhusawal sub-station).
(4) East and West Khandesh ...	25 MW	
(5) Transmission Losses ...	10 MW	
Total ...	110 MW	

As stated above 50 MW of power will be supplied from Ukai to North and South Gujarat areas in 1966-67. The load demands of North and South Gujarat Areas in 1966-67 are 38 MW and 34 MW respectively. At Utran, there will be 3×7·5 MW and 3×15 MW sets by 1966-67. This installation will be necessary in any case to meet the load demands before Hydro power from Ukai begins to flow. The present capacity at Utran power station is 3×7·5 MW sets. Three 15 MW sets are proposed to be installed at Utran in Second Five-Year Plan period. The total demand at North and South Gujarat areas by 1966-67 will be 72 MW as stated above. Out of this 50 MW will be supplied from Ukai. The remaining 22 MW will be supplied from Utran Station. The total firm generating capacity at Utran will be 52 MW by 1966-67. Thus there will be about 30 MW of power surplus at Utran. The firm capacity of the Ahmedabad Licensees by 1966-67 will be about 105 MW, since 37 MW generating capacity of the Ahmedabad licensees will have to be retired by that time. The demand of Ahmedabad Licensee by 1966-67 is expected to be 150 MW. Thus there will be a shortage of about 45 MW for Ahmedabad licensee. Out of this shortage of 45 MW, 20 MW will be met from Ukai. The remaining shortage of 25 MW could be supplied from the surplus power available at Utran. Under this project provision is made for transmission line capacity and step down sub-station at Sabarmati to transmit 45 MW to Sabarmati. Ukai power will be sent direct to Sabarmati and the Utran power will be utilised in North and South Gujarat areas. Thus the firm capacity at Utran as well as at Ukai will be fully utilised by 1966-67.

In 1971-72 the position will be that the total load of the area will be 340 MW (excluding the Railway demand) whereas generating capacity will be 267 MW (including 110 MW at Ukai) indicating a shortage of 73 MW and showing that additional generating capacity will have to be developed either at Narbada or elsewhere. Since power will not be developed under this project during the Second Plan period no provision has been made in the Plan for the power part.

MAJOR AND MEDIUM IRRIGATION

Out of the total cultivable area of 4,97,60,585 acres in this State, only an area of 10,50,504 acres was provided with irrigation facilities prior to the beginning of the First Five-Year Plan. In order, therefore, to provide more irrigation facilities in the State, Government launched under the First Five-Year Plan a programme of major, medium and minor irrigation works. This programme was also supplemented by that for lifting water for irrigation purposes.

The Irrigation Programme of this State Government in the First Five-Year Plan can be broadly divided as under :—

(a) Major Irrigation Projects,

(b) Medium Irrigation Projects, and

(c) Minor Irrigation Schemes.

(a) *Major Irrigation Projects.*—Under the First Five-Year Plan, six major irrigation projects shown below were taken up. The sub-joined statement shows the total estimated cost of each project, the expenditure likely to be incurred till the end of 1955-56 and the balance of cost which has to be provided in the Second Five-Year Plan for their completion :—

(Rs. in lakhs)

Name of Project	Total cost	Expenditure up to 1955.56	Balance of cost provided in the Second Plan
1. Gangapur Dam	3,95·98	2,94·96	1,01·02
2. Ghataprabha Left Bank Canal	5,45·00	5,11·04	33·96
3. Mahi Right Bank Canal	8,86·00	4,75·02	4,10·98
4. Ranand Tank	30·18	27·07	3·11
5. Kolchi Weir	34·50	27·62	6·88
6. Kakrapar	11,01·00	6,21·17	4,79·83
Less Savings ...	......	......	— 35·78
Total ...	29,92·66	19,56·88	10,00·00

Work on all the above projects has reached an advance stage of execution and irrigation has already commenced on completed portions of the Kakrapar and the Ghataprabha projects, bringing an additional area of 94,800 acres under irrigation. In the Second Plan a provision of Rs. 10 crores has been included for completion of these projects which are expected to irrigate a total additional area of 12,71,000 acres on completion and to yield approximately 4·85 lakh tons of additional food grains. In addition the following nine new Projects which are estimated to cost in the aggregate Rs. 100·73 crores will be taken up. In the Second Plan a provision of Rs. 33 crores has been made for these Projects as shown below :—

Name of the Project	Total cost	Five year cost 1956–61	Area likely to be irrigated (seasonal)
	(Rs. in crores)		
I. Gujarat			(acres)
(1) Mahi (Kadana Reservoir) Project	13·10	5·00	7,51,000
(2) Sabarmati Project	13·12	1·00*	3,94,000
(3) Narmada Project	25·00	3·00	11,57,100
(4) Banas River Valley Project (Dantivada) ...	7·37	3·00	1,20,000
Total I ...	58·59	12·00	24,22,100

*The provision for the Sabarmati Scheme in the Plan is under correspondence with the Government of India.

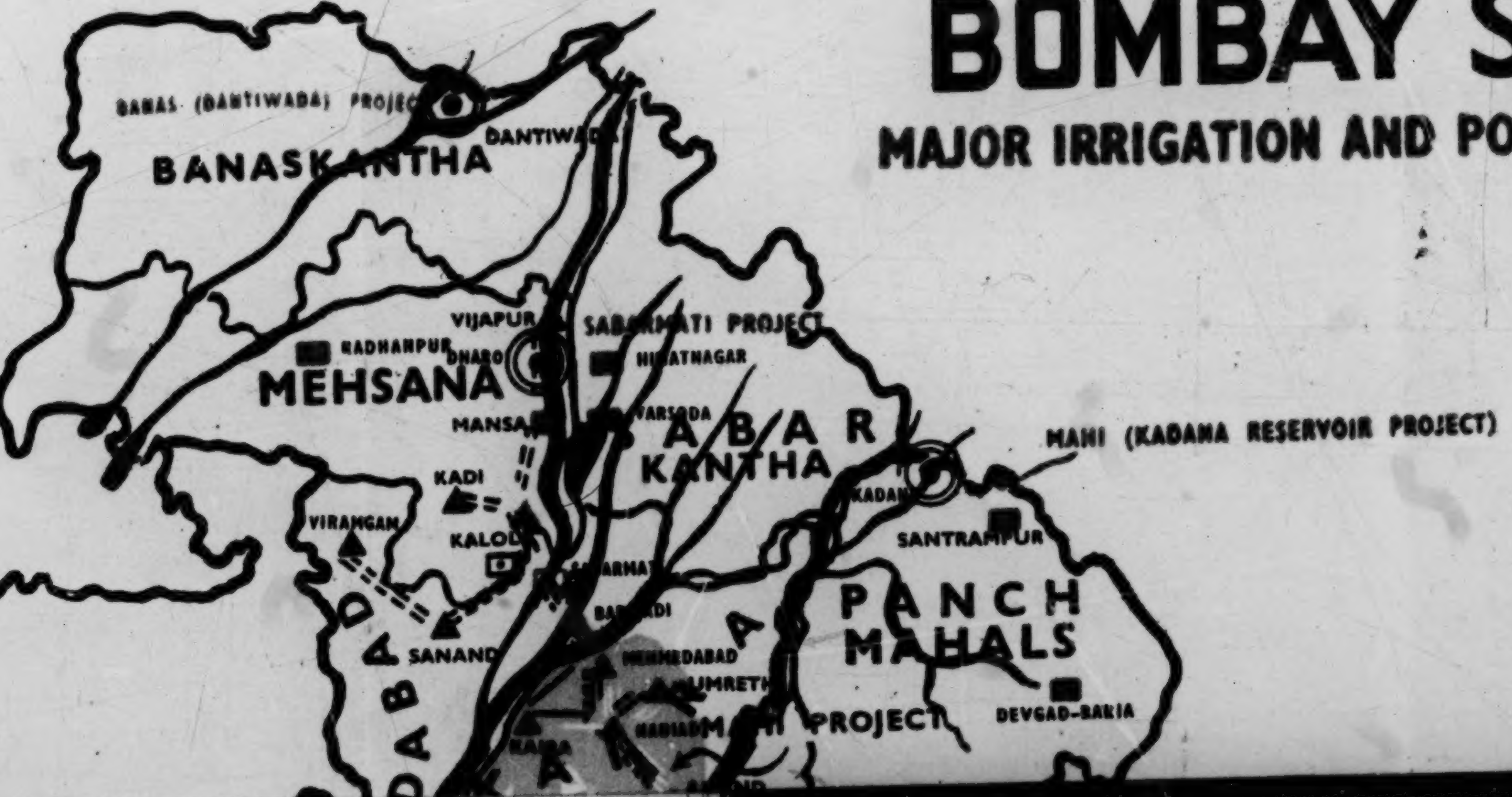
Name of the Project	Total cost	Five year cost 1956–61	Area likely to be irrigated (seasonal)
	(Rs. in crores)		
			(acres)
II. Maharashtra			
(1) Vir Dam Project	4·61	4·50	1,43,000
(2) Khadakwasla Project	11·82	3·00	2,04,000
(3) Mula Project	8·39	3·00	2,04,000
(4) Girna Project	8·08	4·00	1,84,000
Total II ...	32·90	14·50	7,35,000
III. Karnatak			
(1) Ghataprabha Project Stage II	9·24	6·50	2,05,000
Total III ...	9·24	6·50	2,05,000
Grand Total I, II, III ...	100·73	33·00	33,62,100

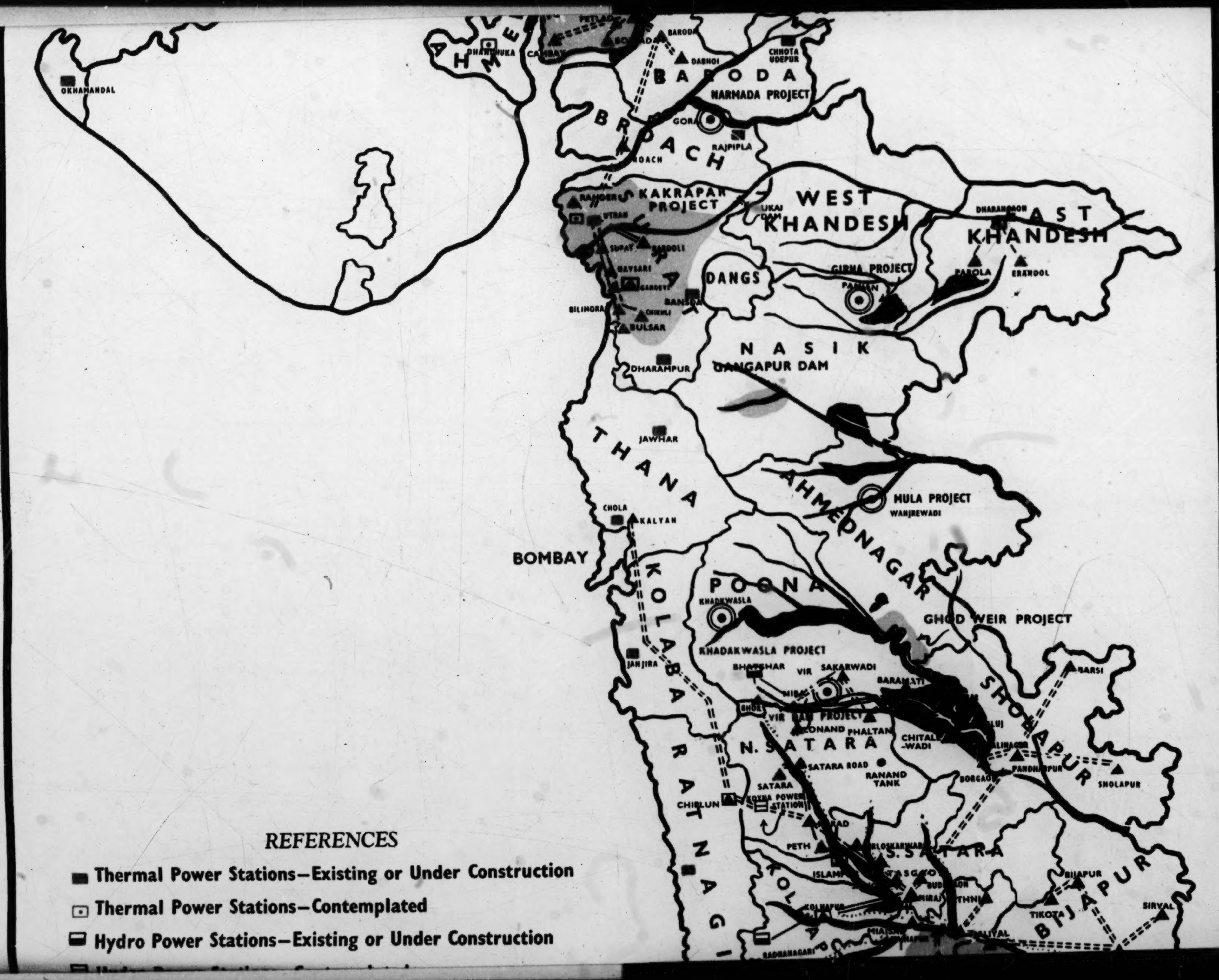
The above 9 projects are expected to irrigate an additional area of 33,62,100 acres on completion.

(*b*) *Medium Irrigation Projects.*—Under the First Five-Year Plan a programme of medium irrigation works was undertaken under the special loan programme of Rs. 4·87 crores sanctioned by the Planning Commission for the permanent improvement in certain scarcity areas. The estimated cost of these works has now gone up considerably. Some of the works have not yet been completed and a provision of about Rs. 6 crores has been made in the Second Five-Year Plan for their completion. In addition it is proposed to undertake in all eight new Medium Irrigation Projects each costing between Rs 80 lakhs to 3 crores under the Second Five Year Plan. They are of various categories consisting of construction of small reservoirs, tanks, canals etc. These eight projects are together estimated to cost Rs. 11·90 crores, and on completion will irrigate an area of about 3,21,000 acres. A provision of Rs. 11·90 crores is made in the Second Five-Year Plan for these projects. All the schemes except Gangapur will provide seasonal irrigation. On Gangapur

BOMBAY STATE

MAJOR IRRIGATION AND POWER PROJECTS




OKHAMANDAL
AHME
DHANDHUKA
CAMBAY
PETLAD
BORSAD
BARODA
DABHOI
CHHOTA UDEPUR
BARODA
NARMADA PROJECT
GORA
RAJPIPLA
BROACH
BROACH
KAKRAPAR PROJECT
RANDER
UTRAN
SURAT
SUPA
BARDOLI
NAVSARI
GANDEVI
BILIMORA
CHIKHLI
BULSAR
BANSDA
DHARAMPUR
DANGS
UKAI DAM
WEST KHANDESH
DHARANGAON
EAST KHANDESH
PAROLA
ERANDOL
GIRNA PROJECT
NASIK
GANGAPUR DAM
JAWHAR
THANA
CHOLA
KALYAN
BOMBAY
AHMEDNAGAR
MULA PROJECT
WANJREWADI
POONA
KHADKWASLA
KHADAKWASLA PROJECT
GHOD WEIR PROJECT
BARSI
KOLABA
JANJIRA
BHATGHAR
VIR
SAKARWADI
BARAMATI
NIRA
BHOR
VIR DAM PROJECT
LONAND
PHALTAN
CHITALI -WADI
AKLUJ
MALINAGAR
PANDHARPUR
SHOLAPUR
SHOLAPUR
N. SATARA
SATARA ROAD
RANAND TANK
SATARA
BORGAON
CHIPLUN
KOYNA POWER STATION
KARAD
PETH
S. SATARA
ISLAMPUR
TASGAON
BUDHGAON
MIRAJ
ATHNI
BIJAPUR
TIKOTA
SIRVAL
BIJAPUR
KOLHAPUR
KOLHAPUR
RATNAGIRI
RADHANAGARI
REFERENCES
Thermal Power Stations—Existing or Under Construction
Thermal Power Stations—Contemplated
Hydro Power Stations—Existing or Under Construction

▬ Hydro Power Stations—Contemplated

▲ Receiving Stations—Existing or Under Construction

▲ Receiving Stations—Contemplated

▲ Receiving Stations Existing Thermal Power Stations To Receive—Bulk Power Later

— Transmission Lines Existing or Under Construction

==== Transmission Lines —Contemplated

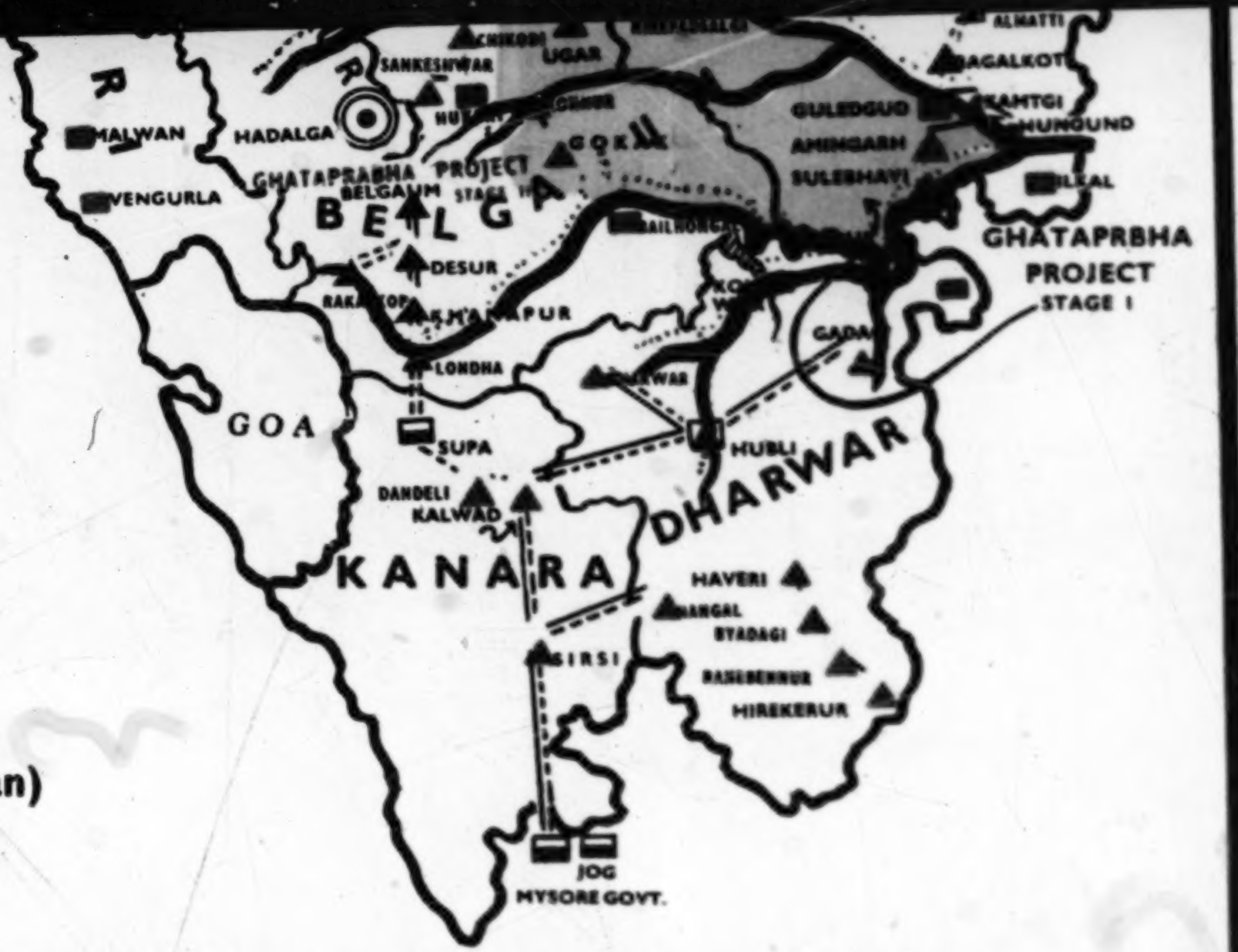
▬ Existing Irrigation Works

▨ Major Irrigation Projects (First Five-Year Plan) Area

◎ Location of Major Irrigation Projects (Second Five-Year Plan)

☐ Location of Thermal Power Stations-Extension (Second Five-Year Plan)

▬ Location of Hydro Power Stations-Extension (Second Five-Year Plan)



Storage Stage II Project there will be perennial and seasonal irrigation. All these projects are located in Districts which are affected by scarcity. The following statement gives the details of these projects :—

Serial No.	Name of Project	Districts benefitted.	Estimated cost (Rupees in crores)	Area likely to be irrigated (Acres in thousands)	Cost per acre Rs.
1	Saraswati River Scheme ...	Mehsana ...	1·50	45	330
2	Hatmati Reservoir ...	Sabarkantha ...	1·50	79·6	262
3	Shetrunji	Amreli ...	1·20	19	630
4	Shamalaji (Meshwa Reservoir).	Kaira and Sabarkantha.	1·00	26·4	400
5	Gangapur Storage Stage II.	Nasik and Ahmednagar.	1·70	35	485
6	Varna Project ...	Kolhapur and South Satara.	1·60	74	535
7	Kurnur Tank ...	Sholapur ...	2·60	28	928
8	Dharma Project ...	Dharwar ...	0·80	14	571

(c) *Minor Irrigation.*—The programme of minor irrigation has been included in the programme for agriculture and briefly described in Chapter 8IV.

Research.—The Central Board of Irrigation and Power has suggested that every State should have its own Engineering Research section. It is accordingly proposed to establish a full-fledged Research Institute of this type at a total cost of Rs. 65 lakhs. This institute will conduct research work both on Roads and Irrigation. A provision of Rs. 15 lakhs is, therefore, being shown under Road Development and the balance of Rs. 50 lakhs is shown under Irrigation and Power.

POWER PROJECTS

The Planning Commission has laid stress on development of heavy industries as also small-scale and cottage industries under the Second Five-Year Plan. As a result of this aspect of development it is expected that the demand for power will increase substantially. The subjoined statement shows the probable demands in 1956 and in 1961 and the existing power facilities in the three regions of the State :—

Zone	Probable demand for power (M. W.)		Available power facility (M. W.)
	1956	1961	
1. Northern Zone	133	170	127 Ahmedabad. 15 Utran.
2. Central Zone—			
(i) Bombay-Poona	330	482	330
(ii) Rest	10	73	30
3. Southern Zone	5	27	12
Total ...	478	752	514

Under the First Five-Year Plan the following Power Projects were taken up The Chola Power Station Scheme has already been completed. The other schemes are expected to be completed by the end of 1955-56 or shortly thereafter :—

(1) North Gujarat Electric Grid Scheme,

(2) South Gujarat Electric Grid Scheme,

(3) Jog Karnatak Electric Grid Scheme,

(4) Chola Power Station Scheme,

(5) Radhanagari Hydro-Electric Project,

(6) Kolhapur Emergency Irrigation and City Conversion Scheme,

(7) Nursery Scheme for establishment of diesel and thermal stations in towns and villages.

In addition rural electrification schemes were also taken up with the loan assistance sanctioned by the Government of India in the latter part of the First Plan period.

The Koyna Project Stage I was also commenced under the First Five-Year Plan as a power project.

The above Projects except the Koyna Project are expected to add about 1,11,800 K. W. to the existing load available. In order to step up the progress of the Power Projects and for the better management of the works executed, a Board called the Bombay State Electricty Board was established in November 1954. All the Power Projects except Koyna completed or in progress were transferred to the Board.

Under the Second Five-Year Plan it is proposed to expand the power facilities with a view—

(*i*) to make power available in all the important areas of Bombay State in adequate quantity and at economical rates, so as to help the industrial development and to assist in solving the problems of unemployment both rural and urban,

(*ii*) to develop the principal sources of hydro-electric power in the State and to provide adequate thermal reserve to meet the needs of an integrated system,

(*iii*) to provide inter-connecting transmission and distribution lines so that power is available to as large an area as possible and the exigencies of hydro-shortage or other deficiencies in one area may be met by assistance from the other. With these objects in view, major power projects are proposed to be taken up during the Second Five-Year Plan period. The total cost of the four projects proposed in the Second Five-Year Plan is Rs. 5·29 crores. The Koyana Project which was originally taken up as a power project is now proposed to be taken up as a Multi-purpose project and has been provided for separately. The details of the Projects proposed to be taken up under the second Five-Year Plan are as follows :—

Name of the project		Rupees in crores
(1) South Gujarat Electric Grid Scheme Extensions	..	4·00
(2) North Gujarat Electric Grid Scheme Extensions	..	0·64
(3) Jog Karnatak Electric Grid Scheme Extensions	..	0·60
(4) Investigation and Survey of Power Projects	..	0·05
Total	..	5·29

Besides, a provision of Rs. 3·71 crores is made in the Second Plan for completion of the power projects and rural electrification schemes carried over from the First Plan period.

With the tapping of the resources of hydro power in the State, it is felt that heavy industries like chemicals, alluminium, ferro-manganese, paper manufacturing, etc., should be developed since they depend on power for successful operation.

The *per capita* consumption of electricity (KWH) for the year 1953 for the Bombay State is as follows :—

(1) Residential	8·74	Units.
(2) Commercial	2·8	Units.
(3) Industrial	43·78	Units.
(4) Public lighting	·031	Units.
Total ...	60·7	Units.

It is expected that by the end of the First Five-Year Plan period the *per capita* consumption of the Bombay State will have been as follows :—

(1) Residential	...	4·04	Units.
(2) Commercial	...	2·96	Units.
(3) Industrial	...	51·20	Units.
(4) Public lighting	...	0·47	Units.
Total	...	58·67	Units.

With the schemes undertaken in the Second Five-Year Plan and also the extensions carried out by public undertakings during the Second Five-Year Plan period, it is expected that the *per capita* consumption in the Bombay State will be as follows :—

(1) Residential	...	4·85	Units.
(2) Commercial	...	3·64	Units.
(3) Industrial	...	76·40	Units.
(4) Public lighting	...	0·69	Units.
Total	...	85·58	Units.

CHAPTER VI

INDUSTRY AND MINING

The most important aspect of development of major industries falls directly within the sphere of the Centre. In so far as the State Government is concerned the activities which are under way or are proposed to be undertaken are indicated below :—

(1) Cottage Industries,

(2) Village Industries and

(3) Other Industries.

COTTAGE INDUSTRIES

In its economic and industrial policy announced in 1948, the Government of Bombay has laid great emphasis on the resuscitation of cottage industries as an effective antidote to the problem of unemployment. The stress was on offering training to artisans in the use of improved tools and equipment, conducting research into village and cottage industries, the organisation of industrial co-operatives, the encouragement to non-official institutions like the Bombay Village Industries Board for conducting certain village industries, the amelioration of the economic lot of the Backward Classes, scheduled castes and scheduled tribes and ex-criminal tribes, the liberalisation of the stores purchase policy with a view to securing adequate market for the products of cottage industries and the creation of an administrative organisation for looking after the problems of industrial co-operatives and village industries.

Training schemes.—In order to impart techniques in improved methods of production, there are 116 schools in various cottage industries in this State, notably cotton weaving, wool weaving, hosiery, dyeing and printing, coir work, fibre work, rope making, tanning leather working, sericulture, ericulture, carpentry and smithy, lacquer work, cane and bamboo work, pottery (glazed and unglazed), oil ghanis, carpentry and tailoring. Preference for admission in these schools is given to hereditary artisans. Generally 12 students are admitted in each school and they are paid stipends of Rs. 15 and 20 in rural and urban areas respectively. The courses are generally of one year's duration. These schools have in all touched nearly 527 centres and 13,388 artisans have been trained. About 1,335 artisans are under training at present. Most of the schools are of a peripatetic nature. It is proposed in the Second Five-Year Plan to intensify the activities in this sphere by providing for 25 more schools and by organising 10 training-*cum*-production centres so that the artisans can be given practical work after the period of training is over. In addition, it is proposed to attach instructors to certain types of societies so that the members of such societies can also be trained in improved methods of production and the use of better techniques.

Research schemes.—At present research institutions like the Village Industries Experimental Workshop, the Village Industries Research Laboratory, the Dyeing and Printing Experimental Laboratory, the Small Research Laboratory-*cum*-Sample Production Centre, the Government Pottery Demonstration Centre, Khanapur, and the Government Silk Farm, Hindalge, District Belgaum, are functioning in this State. In addition, the Bombay Village Industries Board also conducts a Research Centre in Handmade Paper and an Apicultural Laboratory. The function of the Village Industries Experimental Workshop is to conduct experiments in equipments used in village and cottage industries, as also to manufacture small quantities of such equipment. The Village Industries Research Laboratory conducts researches and experiments in harnessing chemical sciences to the problems of village and cottage industries the Diyeng and Printing Experimental Laboratory conducts experiments on better and quicker methods of dyeing, substitution of indigenous for foreign dye stuffs and in improving methods of hand-printing. The Small Research Laboratory-*cum*-Sample Production Centre engages itself in research and experimentation on designs for handloom cloth and also in helping the handloom weavers in the adoption of improved looms. The Pottery Demonstration Centre conducts researches in regard to the use of ceramic raw materials in pottery and carries on tests on the suitability of different types of clays. In the Silk Farm, experiments and researches are carried on in regard to mulberry cultivation, silk worm rearing, reeling of cocoons and in the weaving of raw silk. These research institutions also do a considerable amount of propaganda through the official and non-official institutions with a view to persuading the public to profit by the results of such research. Certain Japanese types machines i.e. rush mat loom, torch bulb manufacturing equipment, glass bead making, bamboo cutting machinery, etc. are also being tried with a view to determining their suitability for adoption by the artisans of the Bombay State. During the Second Five-Year Plan period these activities will be expanded notably in the direction of manufacture of improved equipment for village industries, intensified translation of the results of research and greater propaganda for persuading agriculturists to take up to sericulture. New designs of printing and weaving of handloom cloth, new dye stuffs and new types of looms are also intended to be designed and propagated. Integrated control of these research institutions with a view to co-ordinating their activities and yielding maximum results is also proposed.

Organisational and development schemes.—The emphasis of the Government of India and the State Governments is on the economic development of the rural areas through the co-operative movements. The structure of the industrial co-operative movement in Bombay State is like that of a pyramid with the State Industrial Co-operative Association at the apex, the District Industrial Co-operative Associations at the centre and the primary societies at the base. There are at present 21 District Industrial Co-operative Associations with one State Industrial Co-operative Association, at the apex. During the First Plan period the number of Primary Industrial Co-operative Societies which include wavers' Societies, Tanners' and leather workers' Societies, Coir and ropemakers' Societies, Carpentry and Smithy, Cane and bamboo workers' Societies, women's Societies, labour contract and forest labourers' societies, has steadily increased from 1251 to 1478 i.e. by about 14 per cent. and their membership has risen from 1,10,553 to 1,45,707 or by 22 per cent. The weavers' Co-operative Societies increased from 479 to 535 while substantial increases were recorded in the number of Forest Labourer Co-operative Societies which increased from 102 to 170 and in the number of Labour Contract Societies which increased from 35 to 125 during the First Plan period. The report of the Committee of Direction appointed by the Reserve Bank of India has recommended the partnership of Government with the co-operative societies. It is proposed under the Second Five-Year Plan to extend this principle of partnership in the case of industrial co-operative societies also. To strengthen the management of these societies, it is also proposed to give grants to some of these types of societies, i.e. labour contract, forest labourers, Backward Classes, etc. for appointment of qualified personnel as Secretaries. In order to strengthen the owned resources of these societies, it is also proposed to give advances to their share capital so that they may be able to borrow on the strength of their capital as also the contribution of Government. Besides, it is proposed to organise 7 more District Industrial Co-operative Associations so as to cover the whole of the Bombay State by the end of the Second Plan period. The Plan also provides for organisation of 125 forest labourers' co-operative societies, 75 labour contract societies, 50 societies in the Backward Classes areas (other than forest labourers' and labour contract societies) and 10 societies in the Scheduled Areas of the Bombay State. This is exclusive of the organisation of the other types of societies which also will be intensified.

Handloom Industries.—Over 2 lakh persons are employed on handlooms in this State. Latterly the Government of India has made substantial assistance available to State Governments for the development of handloom industry. It is proposed to take advantage of the assistance from the Cess Fund and also the assistance of the Government of India which may be made available to the States for the development of the handloom industry during the Second Plan. A provision of Rs. 1·08 crores has been included in the State plan for the development of the handloom cotton and woollen industries.

Other Small Industries.—Similarly, an expenditure of nearly Rs. 30 lakhs is to be incurred on the development of the tanning and leather working industries, a large proportion of artisans engaged in which belongs to the Backward Classes. On the development of the coir industry, it is proposed to spend Rs. 5 lakhs and on pottery and sericulture industries Rs. 3·0 and Rs. 3·95 lakhs respectively during the Second Plan period. In order to develop light engineering industries and stimulate employment among the artisans in the manufacture of ancillary and component parts of large-scale machinery, a provision has been included in the Plan.

Scheme for unemployment relief.—Finally, as the relief of unemployment is the king-pin of the Second Five-Year Plan it is proposed to establish 46 unemployment relief-*cum*-Vocational Training-*cum*-production centres in the State and to provide employment opportunities to about 7000 persons at these centres for which a provision of Rs. 1·3 crores has been included in the Plan.

Industrial and Co-operative Banks.—In order to channelise all the requirements of finance for the industrial co-operative societies and the individual artisans five District and one Regional Industrial Co-operative Banks have been established. All these banks are now working at a profit. The membership of these banks has increased from 1268 to 2217 or by 74 per cent and the working capital has increased from Rs. 15,85,025 to Rs. 26,32,407 or by 65 per cent during the First Plan period. Under the Second Five-Year Plan it is proposed to organise more industrial co-operative banks of which one has already been registered at Dharwar. These banks and the existing banks would cover practically all the major districts of Bombay State. The remaining districts of Bombay State will be looked after by the Bombay State Co-operative Bank or the Central Co-operative Banks whichever is the financing agency for that particular area. Necessary provision has been included in the Second Plan for contribution to the share capital of the existing and new industrial co-operative banks at the rate of Rs. 25,000 each and also on account of grants for management expenses up to Rs. 5,000 for the first year, Rs. 4,000 in the second year and Rs. 3,000 in the third year of the working of the banks. All loans which will be made available by the Government of India and the State Government for the development of cottage industries on a co-operative basis will be made available to these banks, the Bombay State Co-operative Bank and the Central Co-operative Banks in the districts for being re-loaned to the individual artisans and their co-operative societies. With this adequate provision and the Government of India's decision to reimburse a substantial portion of the non-recoverable loans advanced to industrial co-operatives and cottage industries, it is expected that significant development will take place in the sphere of cottage and small-scale industries.

Marketing.—In order to facilitate marketing of cottage industries products the State Government had established certain sales depots in important district towns in Bombay all of which have now been transferred to the District Industrial Co-operative Association. As part of the scheme for the development of the handloom industry, 100 sales depots have now been established and these are being run by the District Industrial Co-operative Associations or Weavers' Societies. It is proposed to organise 132 sales depots in all for handloom and other cottage industries products. Side by side, to carry on effective propaganda and publicity, three mobile vans for the display and sale of handloom cloth have been put on the roads and are now operating in Sholapur, Bijapur, Dharwar, Belgaum, North Kanara, Kolhapur, North Satara, South Satara, Ahmednagar, Nasik, East Khandesh, West Khandesh and Poona Districts. It is proposed during the Second Five-Year Plan period to have three more such mobile vans for handloom cloth and additional four mobile vans having specially designed bodies as mobile sales shops and having public address equipment for marketing other cottage industries products. In addition to the 2 Marketing Officers it is also proposed to appoint 4 marketing officers and 4 propagandists whose main functions would be to find a market for and propagate the use of cottage industries products. An expenditure of Rs. 8·38 lakhs is intended to be incurred on the additional schemes during the Second Five-Year Plan period.

Achievement Audit.—On the recommendations of the State Co-operative Council, it is proposed to have achievement audit or Current evaluation. Evaluation, broadly speaking, means an assessment or appraisal of progress made in any undertaking. The achievement audit suggested by the Council seeks to evaluate the work that is being done in the course of implementation of the schemes of development. Accordingly, a scheme for Achievement Audit of the activities for the promotion of small industries including industrial co-operatives in the Bombay State, and for the publicity of the departmental activities periodically etc., costing Rs. 2 lakhs has been included in the Second Five-Year Plan.

VILLAGE INDUSTRIES

The Government of Bombay had constituted a committee consisting of non-officials with considerable experience in village industries work for looking after the development of village Industries. This Committee has now been constituted into a Statutory Board. An amount of about Rs. 8 lakhs is made available every year to this Board as a grant for carrying on activities relating to village industries. The Board generally looks after industries relating to food and clothing. The Co-ordination Committee which consists of officials and representatives of the State Industrial Co-operative Association as well as the Bombay Village Industries Board has decided that the Bombay Village Industries Board should be responsible for the development of the following village industries :—

1. Khadi.
2. Palm Gur.
3. Bee-keeping.
4. Handmade Paper.
5. Salt.
6. Ghani Oil.
7. Crayons & Cray pass.
8. Sealing wax.

9.	Glue.	13.	Slate pencils.
10.	Bone Meal.	14.	Mat Weaving.
11.	Chalk.	15.	Handpounding of rice.
12	Plaster of Paris.	16.	Match Industry.

The Board has also been authorised to obtain funds for the development of these industries directly from the All India Khadi and Village Industries Board. In addition to the existing grant of about Rs. 8 lakhs the Government of Bombay proposes to make available a sum of Rs. 4 lakhs every year during the Second Five-Year Plan to the Board for the development of village industries. The Board is also likely to get assistance from the All India Khadi and Village Industries Board to the extent of about Rs 2 crores to finance its schemes in the Second Plan period. About 15 schemes have been suggested by the Village Industries Board for being taken up in the Second Plan period. These include hand-pounding of paddy, hand spinning and hand weaving of Khadi, development of bee-keeping, neera and palm-gur industries, mat making, paper making, extraction of oil from non-edible oil-seeds for manufacture of soap and varnish, oil seeds pressing, introduction of hand chakkis and bullock chakkies, training in hand made paper making, expansion of the workshops at Dharwar Honawar etc. The implementation of the several schemes proposed by the Village Industries Board is expected to provide direct and indirect employment to about 1·15 lakh persons. The Scheme for development of Khadi alone is expected to provide employment to about 45,000 spinners and 2,000 weavers.

OTHER INDUSTRIES

In order to assist in the development of large and medium scale industries the State Government has offered necessary facilities such as grant of land, power and water supply concessions and financial assistance by way of land and/or contribution towards the share capital of concerns. As a result of this there has been encouraging development in this field as can be seen from a steady expansion of industries in the Bombay State. Since the enforcement of Industries (Development and Regulation) Act, 1951, the State Government received about 500 applications for grant of licenses for establishing new industries or for substantial expansion of the existing industries. These proposals will mean an investment of over Rs. 37 crores with an employment potential of about 15,000 skilled and unskilled labour. The industries covered are paper, pulp, oil solvent extraction plants, switch boards, electric fans, jeep assembly bicycle chains, sewing machines, pharmaceuticals and drugs, cement, earth-movertyres, cotton and woollen fabrics and art silk industries. A special mention has to be made of the licences granted to 10 sugar factories to be established on co-operative basis with direct assistance from the State Government. The establishment of two Oil Refineries in the State has opened new fields for industrial activities. Special mention may be made of a new sugar plant and of production of dyes, sulphuric acid, super-phosphate, typical soda, chlorine, internal combustion engine manufacture, electric motors, textile machinery, etc. It is thus evident that there has been substantial progress on a wide and varied base.

During the First Five-Year Plan period Government has established a State Industrial Finance Corporation with participation by the State Government in its share capital. The Corporation has started functioning and provision is made in the Second Plan for adding to its share capital.

Some progress was also made in the First Plan period in the establishment of trading estates. As the idea was a new one, Government desired that such estates should be organised by private enterprise, Government assisting by grant of loans and other facilities. A loan of Rs. 3 lakhs was granted to the Poona Municipal Corporation in 1951-52 for establishing such an estate near Hadapsar (near Poona). A similar proposal from a co-operative society for establishing such an estate near Belgaum was under consideration and has now taken shape. A scheme of this nature has been almost completed at Kolhapur. Experience has, however, shown that due to various difficulties in organising such estates, private enterprise is not prepared yet to take sufficient initiative. In view of the experience gained so far, it is felt that if the idea of such estates is to materialise the State should take greater initiative and responsibility in organising such Trading Estates. Accordingly, it is proposed to organise a larger number of centres on State initiative at important places in this State during the period of the Second Five-Year Plan. It is expected that these estates will be self-supporting at the end of the Plan period.

Government of India on the recommendations of the Ford Foundation International Experts' Team have established a small-scale Industries Board with a view to assisting rapid development of small-scale and cottage industries. Assistance for such development is to be routed through the State Industries Departments for which Government of India have pressed that steps should be taken to adequately strengthen the staff for this purpose in order that the schemes sponsored and approved by the Small-Scale Industries Board can be implemented expeditiously. In order to induce the State Governments to augment their staff, Government of India have also agreed to bear certain percentage of the expenditure that will be incurred to entertain the additional staff.

In the First Five-Year Plan the Industrial Research Laboratory, Bombay, was expanded to provide facilities on a limited scale both as regards research investigations and for testing products like paints, varnishes, chemicals, minerals, oil-cakes, fuels, etc. With a view to assisting industrialists to improve and standardise their products and to manufacture quality products and in order to reduce cost by adopting improved processes and by making use of by-products, a scheme for issuing test certificates has been in operation for which some staff and equipment have been provided. During the Second Five-Year Plan period it is proposed to widen the scope by undertaking the testing work in other lines, e.g. rubber, plastics, foods, etc. It is therefore, proposed to construct additional buildings and to purchase necessary equipment during period of the Second Five-Year Plan. Provision is also being made to strengthen the Reginal Laboratory at Baroda and to establish a new Laboratory at Poona.

In order to give a fillip to the exploration of mineral deposits of the State, the Bombay Government organised a small Geological Section in 1950. Experience since then has shown that with proper organisation and guidance industrialists have begun to take greater interest in this activity. It is felt that there is still considerable work to be done. Mineral deposits survey is still incomplete. A detailed survey and mapping of these resources is considered necessary as the minerals are important and also form important raw materials, for various basic industries. Some important deposits like Bauxite, Iron-ore, etc., are yet to be properly explored and extracted. Production figures of 1952 for the important minerals were over Rs. 2 crores. With better guidance and organisation the value is expected to be much more. It is, therefore, proposed to expand the section with a view to enable field and survey work to be properly organised.

Having regard to the importance attached to the development of industries, it is considered that the collection of statistics from about 20 per cent of the industrial establishments of the State at present covered by the Census of Manufacturing Industries Rules, is too inadequate to give a realistic picture of the industrial conditions. It is, therefore, proposed to collect industrial statistics in a suitable manner from (1) the remaining 34 industries as is done at present in the case of the 29 industries, i.e. from factories employing 20 or more workers and using power, and (2) collection statistics at suitable intervals, from the remaining factories, i.e., factories not using power and those using power but employing less than 20 workers. It is expected that the industrial production statistics would thus be collected from a larger number of factories registered under the Factories Act, 1948.

At present no statistics of cottage industries are being collected by any Government agency. As the Government of India are keen to assist development of these industries also, it is proposed to undertake sample surveys of cottage industries in order to assess their existing development and also to estimate the future potential development possibilities of the cottage industries. In order to undertake this work it is proposed to sanction separate staff for this purpose during the Second Five-Year Plan.

In addition to the financial assistance which is at present being made available by the Industrial Finance Corporation of India and the State Industrial Finance Corporation a provision of Rs. 270 lakhs for grant of loans to small-scale and cottage industries has been included in the Plan. This amount will be required for the medium and small-scale industries whose needs are not likely to be met by the two Corporations mentioned above.

Provision has also been made in the Plan for establishing a permanent Industrial Exhibition in Bombay. The object of this Scheme which is sponsored by private commercial organisations and to which Government propose to give a loan of Rs. 30 lakhs, is to have a standing arrangement for housing industrial exhibitions from time to time.

It has been decided by the Government of India to introduce the decimal system of coinage and the metric system of weights and measures in place of the existing foot-pound system. Government of India have already appointed a Central Metric System Advisory Committee in order to take necessary steps for the change over. Government of India have also requested the State Governments to take similar steps so far as they are concerned. The Government of Bombay has already appointed a State Committee for this purpose. It is proposed that the changeover should be in several stages. In the initial stage propaganda and publicity work to explain the new system is to be undertaken. An *ad-hoc* provision of Rs. 95,000 has been included for this purpose in the Second Five-Year Plan.

CHAPTER VII

TRANSPORT AND COMMUNICATIONS

The pace of economic development depends considerably on adequate provision of transport facilities, particularly by rail for transport of essential requirements like coal, cement, iron, steel, etc., for the various projects in the different sectors in the Plan. The heavy pressure on rail traffic could be relieved mainly by the development of road transport and in the case of a State like Bombay which has large potentialities of coastal traffic through the development of ports. The State Plans for Transport are therefore essentially supplements to the Central Plan. Another factor which must be borne in mind is the increasing need of transport facilities in rural areas which under the impact of Community Development Projects and National Extension Service have been mobilising all their resources for rapid development. The road programme of the State has, therefore, to be expanded considerably so as to establish a network of large and small road links. Under the First Five-Year Plan of Bombay State, a provision of Rs. 1163·62 lakhs was made for road development and Rs. 25 lakhs for development of minor ports.

Road Development.—The expenditure on the Road Development in the State sector has considerably exceeded the targets set out in the Plan. A total expenditure of about Rs. 16·75 crores is expected to have been incurred at the end of the Plan period on construction or improvement of over 4,000 miles of roads, cement concreting of 830 miles of roads and on construction of 95 bridges out of which 1,140 miles of new construction or improvement, cement concreting of 600 miles of roads and construction of 30 bridges will be completed. In addition it was possible for the State Government to undertake development of State roads and National Highways with the Central assistance of Rs. 5 crores from the Central Road Fund, Rs. 5 crores from the National Highways funds and Rs. 0·85 crores from other funds made available to the State Government during the First Plan period. Provision of Rs. 8 crores is being made in the Second Plan for works which are in progress at present and which will be continued during the Second Plan. In addition an amount of Rs. 1 crore will be utilised for new works of inescapable nature during that period. Provision for National Highways, Express Highways, Central Road Fund Works and Centrally Aided Works for Scheduled Adiwasi and other Backward Areas which will be additional is not shown in the State Plan except to the extent of the matching expenditure which the State Government has to provide. A provision of Rs. 3·65 crores needed to match expenditure on roads in the Central Sector has accordingly been made in the Plan.

In addition a further provision of Rs. 4 crores has been included in the Plan for giving grants to local bodies for village approach roads and for improvements to roads. It is also intended to set up a Road-*cum*-Irrigation Research Institution at a total cost of Rs. 65 lakhs out of which the cost to be borne on Roads will be Rs. 15 lakhs.

Development of Minor Ports.—There are about 90 minor ports dotted along the 800 miles long coast line of the Bombay State. Most of these ports which are under a constant threat of silting and erosion and which were neglected in the past several years needed considerable improvement. A programme of Rs. 32 lakhs was, therefore, drawn up by the State Government under the First Five-Year Plan for survey and experiments of these ports and for provision of improved landing and wharfing facilities and amenities to passengers. Most of the surveys have been completed and the works relating to landing and wharfing facilities, construction and repairs to jetties, passenger sheds, etc., which are in progress at present will be completed during the Second Plan period. For the development of Port Okha which is an intermediary port a separate programme estimated to cost Rs. 20 lakhs was drawn up. This cost is being met entirely from the loans made available to the State Government by the Government of India. The work on development of Port Okha will also be continued during the Second Plan period. A total provision of Rs. 83 lakhs has been made in the Plan for the development of minor ports in this State, out of which a sum of Rs. 33·44 lakhs is earmarked for completion of the works carried over from the First Plan period, including Rs. 16 lakhs intended for Port Okha. The programme of new works comprises operation of drag line excavators and dredging and also provision of facilities at various minor ports.

Road Transport.—With the improved conditions of the roads and expansion of road mileage under the programme of National Highways and the Road Development Programme of the State there is bound to be substantial expansion of the motor transport services which as stated earlier supplement the transport facilities provided by the Railways. The Bombay State having committed itself to nationalisation of road transport launched on the scheme of nationalisation of passenger service in the year 1948. A State Transport Corporation was set up with a view to covering the entire State by gradually taking over the passenger services from private operators. For the purpose of operating this Scheme the State was divided into 16 divisions. On the eve of the Five-Year Plan, i.e. on 31st March 1951, the scheme had been implemented fully in four divisions and partly in seven others by taking over 581 routes with a daily mileage of about 97,000. The total fleet in operation was of 1,453 vehicles. The capital investment on the scheme was to the tune of Rs. 514·66 lakhs which was financed entirely from the capital contributions from the State and Union Governments totalling to Rs. 533·33 lakhs.

During the First Five-Year Plan period the scheme has shown considerable progress. The total fleet owned by the State Transport as on 31st March 1955 was 2,826 vehicles operating on about 1,778 routes with a route mileage of 46,373. The daily mileage covered was 1,93,000 and the number of passengers carried daily was 4,70,370. The total capital investment on the scheme up to March 31, 1955 was Rs. 1,228·27 lakhs (estimated) from the inception (excluding capital advances and outstanding liabilities) and Rs. 713·61 lakhs (estimated) during the four years of the First Five-Year Plan. The total capital receipts from the participating Governments stood at Rs. 1,157·41 lakhs from the inception of the scheme. The capital receipts during the four years of the Five-Year Plan amounted to Rs. 624·08 lakhs, contributed at Rs. 373·88 lakhs by the Union Government and Rs. 250·20 lakhs by the State Government. A provision to the extent of Rs. 200·00 lakhs only was made in the First Five-Year Plan towards the scheme of nationalisation of road transport.

During the year 1955-56, the scheme was extended to cover 1900 routes. The number of vehicles put into operation by the end of March 1956, was 3,136. The whole of the State has thus been practically covered by the passenger road transport service as originally planned. The following table shows the general trend of the development since the implementation of the scheme.

Year	Number of vehicles held	Number of routes taken over
1948-49	469	150
1949-50	1,066	369
1950-51	1,453	581
1951-52	1,779	819

Year	Number of vehicles held	Number of routes taken over
1952-53	2,002	1,097
1953-54	2,442	1,477
1954-55	2,826	1,778
1955-56	3,136	2,126

It would be observed that the development in the nationalisation of passenger transport has been rapid from year to year. Consequently, essential buildings, such as depots, garages, workshops have been set up in some cases on temporary basis leaving building of permanent structures to the second phase of the programme. Likewise the demand for extension of services on new routes formed and increase in traffic arising out of the economic activites in the First Five-Year Plan in the underdeveloped areas will have to be provided in the Second Five-Year Plan period. The object of the scheme of passenger transport was to eliminate unhealthy competition among the private operators leading to waste of national resources as also in foreign exchange resources and on the other side, from the point of view of the travellers, to afford regular, dependable and comfortable services. The objects have been fulfilled to a large extent so far during the first phase of taking over the services from private operators. The second phase of the programme now proposed will concentrate on improvement of the services and provision of adequate facilities to meet the increasing demand on this service. It is, therefore proposed to provide for the operation of 781 vehicles in the Second Five-Year Plan to meet the increase in traffic which is estimated at 5 per cent. every year. The cost of these vehicles at Rs. 38,500 per vehicle is estimated at Rs. 300·70 lakhs. The cost of setting up permanent structures in place of temporary ones, now existing, and for construction of staff quarters, for operating staff of the Corporation works out to Rs. 255·65 lakhs. Besides Rs. 247·0 lakhs will have to be provided for repayment of the loan received by the Corporation in respect of Canadian chassis.

It is also proposed to replace the present fleet of petrol vehicles by diesel vehicles gradually. As the cost of a diesel vehicle is nearly two and half times the cost of a petrol vehicle the extra capital cost on account of conversion of vehicles which is estimated at Rs. 90·65 lakhs is also required to be provided. Thus the total demand for the scheme in the Second Five-Year Plan would come to Rs. 890·00 lakhs. Of this the Corporation will be able to find about Rs. 3 2 crores from its own funds. The Government will, therefore, have to provide an amount of Rs. 5·70 crores in the Second Plan to enable the Corporation to complete its scheme of passenger transport service. The State share of expenditure, viz., Rs. 3 75 crores is shown in the State Plan, the balance of Rs. 1·95 crores being the contribution of the Railways to the State Transport Corporation will be shown under the Central Plan.

Besides operating the passenger transport service the Bombay State Road Transport Corporation is also operating a goods transport service on a non-monopolistic basis in certain divisions of road transport. With the availability of trucks under the Colombo Aid Plan, it was possible to operate goods service on an experimental basis side by side with the private operators during the last three years. The operation of goods trucks commenced in April 1953 with about 90 trucks in Bombay division. The operations were extended slowly to the other divisions of the State Transport. In the early stages of the schemes the trucks were utilised for the transport of food grains for the Civil Supplies Department of the Government of Bombay. Consequently on the decontrol of food grains the scheme was amended to undertake the transport works from the private parties and from Government departments, engaged on a large scale developmental projects. Besides, some of the Municipal and District Local Board Works were also available to the State Transport on competitive basis. On 31st March 1955 about 404 trucks were operating on road per day doing about 27,000 miles a day. Further scheduled lorry services have been recently started on various routes in the State. At present these services are operated on 50 routes. The operation of the goods transport service will be continued on the existing basis.

CHAPTER VIII

EDUCATION

The programme of development under "Education" indicating the achievement during the first plan period and the lines along which it is proposed to proceed in the Second Five-Year Plan period can be divided under the following main heads :—

(I) *General*—

(*a*) Primary (including basic) ;

(*b*) Secondary ;

(*c*) Higher ;

(II) *Technical*—

(III) *Special*—

(*a*) Physical, visual and social including care of the handicapped, juveniles, etc.,

(*b*) Art Education, and

(*c*) Library development.

I

GENERAL

(*a*) *Primary Education* (*including basic*).—On attainment of Independence, foremost priority was given to the introduction of compulsory primary education and it was introduced in 1947-48 in all places with a population of 1,000 and above according to the 1941 census in the 19 pre-merger districts and it was applied progressively to children in the age-range 7–8, 7–9, 7–10 and 7–11 from year to year so that, by the end of the year 1951-52, which marked the termination of the Post-War Reconstruction Plan and the beginning of the First Five-Year Plan children within the age-range 7–11 in the places concerned were brought under compulsion. The total number of children under compulsion at the end of 1951-52 was 17,25,307 (including areas of authorised Municipality) and the total number of places under compulsion was 5,232. The total number of pupils under instruction in all primary schools in the State during the year 1951-52 was 34,78,221 and the number of primary schools was 28,335. At the end of 1953-54, the number of children had increased to 35,53,750 and that of primary schools to 31,130. In 1954-55 (from 1st August 1954) the scheme for compulsion was extended to all the places with a population of 1,000 and over according to the 1951 Census, including the areas of the merged States. At the end of 1954-55 about 38,30,000 children were under instruction in 33,213 primary schools and it is expected that the target of 39 lakhs of pupils fixed for the First Five-Year Plan has been achieved by the end of 1955-56.

In the year 1955-56 the Government of India sanctioned appointment of 1,639 additional primary teachers in rural areas in this State under the scheme to relieve unemployment among the educated. In addition, the State Government had sanctioned appointment of over 4,000 additional teachers. All these teachers have been appointed providing employment for nearly 11,000 jobless educated young men and women in the rural areas in this State.

The main objectives of the Second Five-Year Plan are :—

(*i*) Extension of compulsory primary education for children of the age range 7–11 in places having a population of 1,000 and over according to 1951 census where the scheme has been applied to children of the age group 7–9 from 1st August 1954.

BOMBAY STATE

EDUCATION

Number of Schools and Pupils in Primary Education

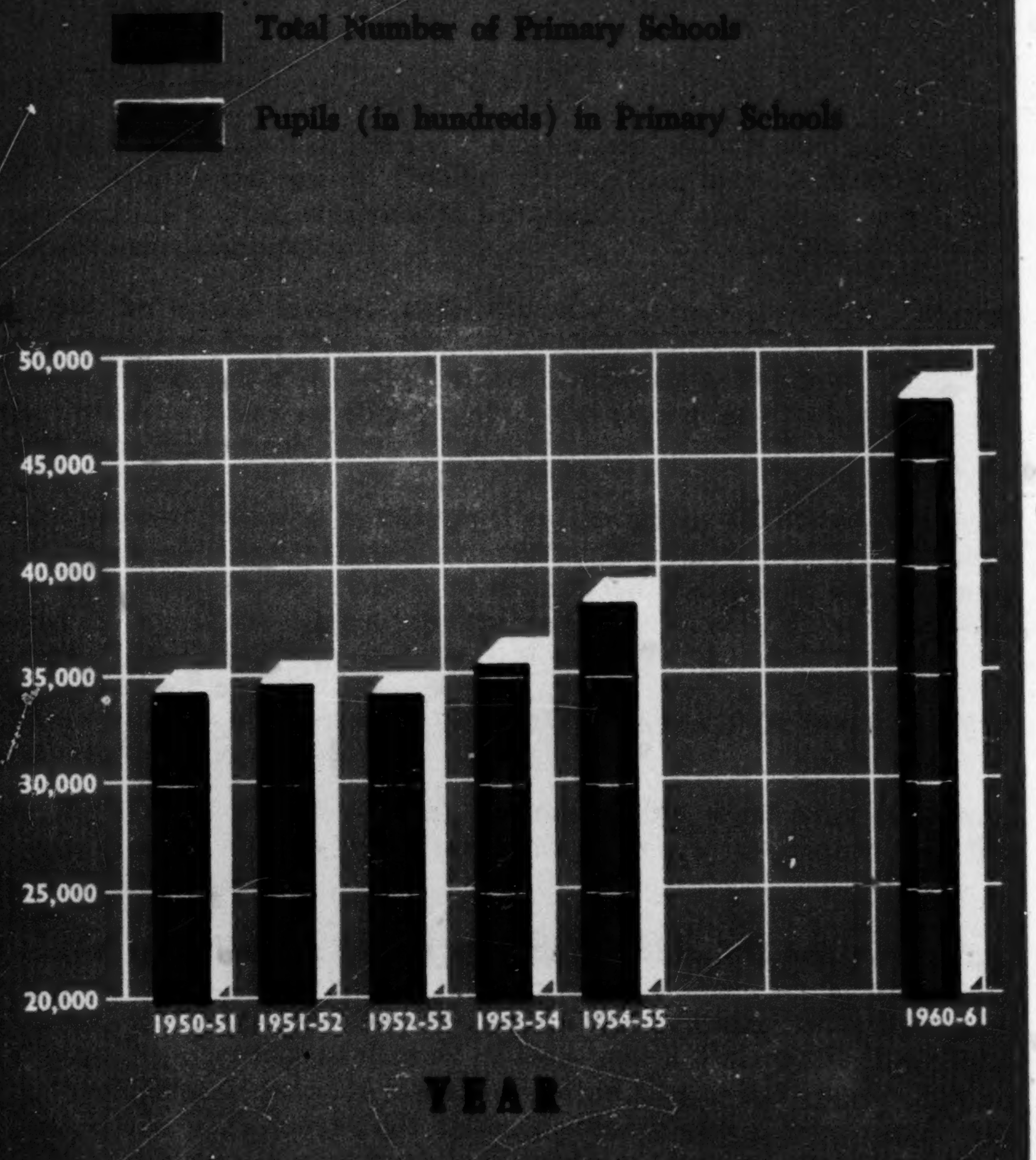


PLATE III

(*ii*) Introduction of compulsory primary education in all places with a population of less than 1,000 according to the 1951 census.

It is proposed during the Second Five-Year Plan period to extend compulsion to all places with a population of less than 1,000 progressively to children of the age-groups 7–8, 7–9, 7–10 and 7–11 so that during the period of 4 years beginning with 1956-57 all children in the age-range 7–11 will be brought under compulsion.

(*iii*) Introduction of compulsory primary education in all places with a population of 1,000 and over, excluding authorised municipalities, for children of the age-range 11-12.

The targets aimed are :—

About 4,44,000 additional children in the age-range 7–11 will have been brought under compulsion by the end of 1960-61. In addition about 3,15,000 children in the age-range 11 to 12 in villages with a population of 1,000 and over will have been brought under compulsion.

Allowing for the normal increase under voluntary expansion, the net increase during the Second Five-Year Plan period in the number of additional children will approximate to 40 per cent. of the total number of children in the schools in 1955-56. This number will be a little over 85 per cent. of the total number of school-going children of the age-group 6–14.

The scheme of *Basic Education* was accepted in principle by the State Government in 1938 and introduced as an experimental measure in 55 primary schools in 4 selected compact areas. On the return to office of the popular Ministry in 1946, Government decided to extend the scheme to all primary schools as early as practicable by—

(1) the introduction of crafts as a first step towards the conversion of ordinary schools into basic schools ; and

(2) the introduction of craft teaching, community life, social work and health education in primary training institutions with a view to their conversion into Basic Training Institutions.

Three Graduates' Basic Training Centres were established in 1948 and some officers and graduates were deputed for training to the institutions conducted by the Hindustani Talimi Sangh, Sevagram. With the help of this personnel trained in Basic Education, it has been possible to convert all Government Primary Training Institutions into basic institutions and to introduce craft in all non-Government Primary Training Institutions, while about 3,000 ordinary primary schools have been converted into craft schools with a view to their ultimate conversion into basic schools. During the last 2 or 3 years, however, the policy was not to embark upon further expansion but to review the progress made and to consolidate the ground already covered.

During the Second Five-Year Plan it is proposed to extend the scheme to about 1,184 additional first-grade primary schools so as to remodel them on the basic education pattern. To begin with, it is proposed to introduce a suitable craft such as (*i*) spinning and weaving, (*ii*) wood-work, cane and bamboo work or (*iii*) agriculture in these schools.

In order to improve the quality of instruction, it is essential that the teaching staff should be trained. Twelve primary training colleges started under the Post-War Reconstruction Scheme have been continued under the First Five-Year Plan. The total number of colleges for the training of primary teachers in 1953-54 was 93 and the percentage of trained teachers in that year was 54·7. At the end of 1954-55 the percentage had increased to about 57. Even so, a considerable leeway remains to be made.

During the Second Five-Year Plan, it is intended to open twelve additional classes in the existing Government Training Colleges. It will, thus, be possible to provide training facilities for an additional number of 500 teachers per year, over and above the existing provision for the training of about 5,500 teachers per year. It is expected that as a result of this measure, about 75 per cent. of the teachers will be trained by the end of the Second Five-Year Plan.

In view of the introduction of Compulsory Primary Education, it became necessary to provide additional accommodation in the existing schools or to construct new buildings to accommodate the additional number of children brought to schools. The work of construction of such buildings is entrusted to District Building Committees which are provided with funds by Government. It was originally proposed to construct about 6,000 new school buildings within a period of 15 years. However, the progress achieved was rather slow, because the scheme contemplated the receipt of ¼th share of the cost as popular contribution as a necessary condition for the grant of Government assistance. Till the end of March 1953, only about 597 new school buildings were completed. Since, 1953-54, the procedure for giving building grants under the scheme has been revised and simplified and an amount of Rs. 50 lakhs advanced every year by way of loans for the construction of school buildings.

In the Second Five-Year Plan, it is proposed to construct about 14,000 additional school rooms and to take up extensive programme of repairs to the existing school buildings at a total estimated cost of about Rs. 5 crores. The bulk of the programme will be implemented through the provision made under Community Development Projects, National Extension Service and Local Development Works. The rest of the programme will be carried out through the agency of the District Building Committees.

The expenditure on primary education in the Bombay State has increased substantially during the past few years from Rs. 3·17 crores in 1946-47 to Rs. 7·91 crores in the year 1951-52. It was Rs. 8·46 crores in 1953-54 and it is estimated that for the first year of the Second Plan, i.e., for 1956-57, the figure will be over Rs. 10 crores.

(b) *Secondary*.—Although education was transferred to a popular ministry as far back as in 1920, nothing substantial in the field of secondary education could be achieved on account of financial stringency until 1937. The popular ministry during the year 1937-38 took certain steps to improve the financial resources of secondary schools by increased grants and also helped to improve the lot of secondary teachers by laying down certain service conditions and by introducing the Provident Fund System. They also took steps to increase the facilities for training in secondary education by starting another Government Secondary Training College at Belgaum. Steps were also taken to give a practical turn to secondary education by converting the Government High Schools into Vocational High Schools.

In 1939, 4 Government High Schools were converted into Agricultural High Schools and 2 into Technical High Schools. Subsequently, 2 more schools were converted into High Schools of Commerce. This progress in the improvement of secondary education was to some extent arrested when the popular ministry went out of office. After the return of the popular ministry, Government appointed in 1946-47, a Secondary Schools Committee to examine the various questions relating to secondary schools. Many of the recommendations made by this committee, such as those of salaries of secondary school teachers, fees, grants-in-aid, and service conditions have been accepted by Government. The position of secondary teacher was thus considerably improved because they were assured of a graded scale of pay, the benefits of Government Provident Fund, the concession of free education for their children, etc. Further, they have also been given security of tenure by suitable revision of the service conditions.

Steps to provide facilities for secondary education in the rural areas were also taken by allotting certain scholarships and free studenships and by increased grants-in-aid to secondary schools located in rural areas.

In the Second Five-Year Plan it is proposed to increase these facilities to pupils from rural areas by the grant of additional free studentships, scholarships, loan scholarships, hostel accommodation and the starting of high schools with Agriculture as one of the optional vocational subjects. The programme of starting multi-purpose secondary schools taken up at the end of the First Five-Year Plan will be implemented more effectively by starting as many as 80 multi-purpose schools during the course of the Second Five-Year Plan. Increased facilities for training in the Auxiliary Cadet Corps and Scouting are proposed to be provided. There will also be Youth Camps, organised for secondary school children. In these ways it is proposed to give children training in leadership. Programmes for improving the professional qualifications of teachers such as refresher courses, seminars and increased facilities in training are also included in the Second Five-Year Plan. There has been acute shortage of accommodation in most of the secondary schools. It is proposed in the Second Five-Year Plan to give substantial loans to non-Government secondary schools towards the construction of school buildings.

(c) *Higher.*—There are at present seven Universities in the State. Of these three are Regional Universities, namely, at Ahmedabad (Gujarat), Poona (Maharashtra) and Dharwar (Karnatak). In addition there are four more Universities in the State, namely, Bombay University which caters to the needs of the cosmopolitan city, the Maharaja Sayajirao University of Baroda which is developing on the lines of a residential University, the S. N. D. T. Women's University, which provides courses designed to satisfy the needs of women in respect of higher education and the recently established Rural University at Vallabh Vidyanagar. Apart from the Bombay University itself all these Universities are in their infancy and need substantial building and equipment grants to enable them to provide facilities for education in the basic arts and sciences. Government has been assisting the Universities by direct financial aid. In addition Government maintains its own colleges of arts, science and commerce and gives grant-in-aid to private Colleges. Government also gives grant-in-aid to Research and Cultural Institutions.

In the Second Five-Year Plan special provision has been made for development on the following lines :—

(1) Schemes costing about Rs. 90 lakhs are proposed to be aided by Government. The respective share of the University Grants Commission and the State Government out of this total of Rs. 90 lakhs will be roughly Rs. 46 lakhs and Rs. 44 lakhs respectively.

(2) A provision of Rs. 10 lakhs is being made as grants-in-aid to private colleges in addition to the present level of grants.

(3) A provision of Rs. 4 lakhs is being made for the development of post-graduate work and research in basic sciences in the Institute of Science, Bombay.

(4) A provision of Rs. 4 lakhs is being made for building and equipment grants to Research and Cultural Institutions.

(5) A provision of Rs. 3 lakhs is being made for expansion of the activities of the Deccan College Post-Graduate and Research Institute, Poona.

(6) It is proposed to earmark Rs. 32 lakhs for providing certain essential requirements of Government Colleges which need either more accommodation or certain important facilities like laboratories and common rooms.

II

TECHNICAL EDUCATION

One of the important Post-War Reconstruction Schemes in the State was the setting up of a special organisation for industrial and technical education to exercise a more effective control over technical education and to cope with the needs of expansion, When the Department of Technical Education was created in 1948 it took charge of the following institutions run by Government :—

1. College of Engineering, Poona,
2. Victoria Jubilee Technical Institute, Bombay,
3. The R. C. Technical Institute, Ahmedabad,
4. Technical High Schools at Bombay and Sholapur,
5. King Edward VII Technical School, Dhulia,
6. Schools of Industry, Satara, Sholapur and Ratnagiri,
7. Powerloom Weaving Instructional Institute, Sholapur, and
8. Some special schools catering for Vocational Education.

Besides the training facilities available at these institutions Government had also organised an Apprenticeship Scheme for training in the textile industry in Bombay City and gave assistance to private schools and technical institutes.

After the establishment of a separate department the facilities for technical education were increased rapidly both at the collegiate and secondary level. A brief description of the important development is given below :—

Expansion of the Engineering College, Poona.—The College of Engineering, Poona, was then the only well-established Engineering College in the State catering for Degree and Diploma Courses in Civil, Mechanical and Electrical Engineering. In 1944 the intake of students to the degree and diploma courses had been raised from 100 to 150 each. Additional accommodation and equipment facilities were, therefore, provided for the College and additional diploma courses in metallurgy and tele-communication were started.

Expansion of the V. J. T. I., Bombay.—Under this scheme, Degree Courses in Mechanical and Electrical Engineering and Textile Manufacture were started with a view to providing adequate facilities for the training of supervisory and executive personnel required by the Cotton Textile Industry and to meet the growing demand for Engineering and Technical Education. The course in Textile was started in 1946 and that in Engineering in 1947. The admissions to these courses were 20 in the Textile and 30 each in Mechanical and Electrical Engineering Courses.

Establishment of an Engineering College at Ahmedabad.—The College was started by Government in June 1948, to expand facilities for Degree Courses in Engineering, Civil, Mechanical and Electrical. The number of admissions was 75 for Degree and 100 for Diploma Courses (taken over from the R. C. Technical Institute, Ahmedabad). The total number of students studying in this College was 163 in 1948 and 540 in 1954.

Reorganisation of the R. C. Technical Institute, Ahmedabad.—Ahmedabad being a big textile centre it was necessary to reorganise and expand the Institute for teaching Diploma Course in (1) Textile Manufacture and (2) Textile Chemistry. Additional expenditure had to be incurred on staff, buildings and equipment.

Opening of more Technical High Schools.—With a view to giving a technical bias to Secondary Education the scheme was launched to convert some High Schools into Technical High Schools. Accordingly six Technical High Schools were started at Ratnagiri, Ahmedabad, Bijapur, Godhra, Jalgaon and Broach. There are now 35 technical high schools in this State.

Establishment of Industrial Schools at Satara, Hubli and Bijapur.—This scheme envisaged the starting of new Industrial Schools at Hubli and Bijapur and the reorganisation of the old School at Satara, with a view to converting them into modern high grade technical institutions training skilled artisans. The Industrial Schools at Hubli and Bijapur were started in March 1950 and June 1952, respectively. The details of courses in which instruction is imparted at the above Institutions are as follows :—

School of Industry, Satara

1. Mechanical Apprentice.
2. Pattern Making.
3. Carpentry " A ".
4. Agricultural Carpentry and Smithy.
5. Handloom Weaving.

School of Industry, Hubli

1. Mechanical Apprentice.
2. Carpentry " A ".
3. Agricultural Carpentry and Smithy.

School of Industry, Bijapur

1. Mechanical Apprentice.
2. Carpentry " A ".
3. Agricultural Carpentry and Smithy.

Reorganisation of the School of Industry, Ratnagiri.—This scheme envisaged reorganisation of the School for conversion into a modern high grade institute and for training in additional courses. The scheme was put into execution in 1948-49 and the following courses were introduced :—

1. Automobile Apprenticeship.
2. Agricultural Carpentry and Smithy.
3. Motor Body Building and Upholstry.

It will thus be seen that considerable work has been done in the sphere of technical education in the matter of consolidation and expansion immediately after the last war and particularly during the First Five-Year Plan period.

Schemes included in the Second Five-Year Plan provide for development along the following main lines :—

(1) Consolidation of the results achieved so far.

(2) Expansion of facilities for Technical Education in the Secondary Education sphere by the establishment of new Technical High Schools and expansion of the existing ones.

(3) Establishing "District Polytechnics" to cater to Technical High School work, trade Certificate classes for those who do not complete their secondary education, Diploma classes in various technical courses for those who complete secondary education and part-time education in trade courses for those usefully employed during the day.

(4) Facilities for part-time training in various subjects for those usefully employed during the day.

(5) Creation of facilities for research in the Degree Colleges.

(6) Creating a number of scholarships for deserving students to proceed with higher education without any economic handicap.

(7) Cheap loans to private bodies to start courses in technical subjects.

III

SPECIAL

PHYSICAL, VISUAL AND SOCIAL INCLUDING CARE OF THE HANDICAPPED, JUVENILES, ETC.

For physical education, it is proposed to provide larger funds for grants-in-aid to five institutions conducting one-year courses and for the expansion of the National Cadet Corps (senior division) and the Auxiliary Cadet Corps. Provision has also been made for holding 80 youth service camps every year, as well as to raise Scout troops in about 280 middle schools. For visual education in addition to the general provision, under the Scheme of Community Development Projects, funds are being provided for liberalising grants to Secondary Schools for the purchase of radios and film projectors and also for two more film libraries. The programme of Social Education will be strengthened in the Community Projects and National

Extension Areas while special provision for the care of the handicapped and juveniles has been made. Regarding the physically handicapped, it is proposed to give liberal grants to non-Government schools to meet the cost of their expansion and to assist them to raise their standards of education. It is also proposed to award scholarships to handicapped students. In the field of Vocational Guidance, it is proposed, to extend the existing facilities by the establishment of three sub-bureaux and by the development of the existing bureau at Bombay into a full Institute of Vocational Guidance.

ART EDUCATION

At present, art education is imparted in this State at the J. J. School of Art and a number of small private Art Schools. The J. J. School of Art is one of the oldest schools of art in Asia imparting training in the following six subjects :—

1. Drawing and Painting (Five Years' Course).
2. Sculpture and Modelling (Five Years' Course).
3. Applied Art (Four Years' Course).
4. Architecture (Five Years' Course).
5. Teacher Training (One Year's Course).
6. Arts and Crafts (Three Years' Course).

Facilities are also provided at the School for part-time instruction in drawing and painting, sculpture and modelling and applied art. Students from all over India as also from other countries such as Ceylon, South Africa and Nepal seek admission at the School. In the Second Five-Year Plan, a total provision of Rs. 5·76 lakhs for expansion of art education and strengthening of the various Departments of the School has been made. In the matter of art development a Department of Music, Dance and Drama will be established at the School. It is also proposed to institute a new training course in Town Planning at the School.

LIBRARY DEVELOPMENT

Government gives substantial grants to the Central, Regional, District, Taluka and Peta libraries in the State which are recognised for the purpose of these grants. In addition the Second Five Year Plan envisages establishment of 1,000 rural libraries under the Community Development and National Extension Service Programmes.

CHAPTER IX

HEALTH

The programme for development of health services and improvement of environment hygiene has three main objectives, viz. (1) provision of better facilities for medical relief, (*ii*) prevention and control of epidemics and communicable diseases, and (*iii*) provision of drinking water supply and sanitary conveniences. Under the First Five-Year Plan an expenditure of about 18·83 crores was incurred on account of extension of health services under the various schemes. As a result of the various measures for better facilities for health and environmental hygiene the death rate per thousand of population has come down from 18·3 in 1950 to 16 in 1954. The infant mortality rate per thousand has also declined from 126 in 1950-51 to 109 in 1954. These rates are the lowest on record. Plague has been entirely eradicated from this State and the incidence of small-pox, cholera and other diseases has been considerably reduced. The health programme proposed to be undertaken during the Second Plan period involves an outlay of Rs. 23·64 crores. A brief account of the programme proposed to be undertaken is given below:—

MEDICAL

The Medical Organisation of the State as distinct from its Public Health Organisation is essentially a hospital organisation designed to render curative medical relief to the general population with ancillary specialist sections providing medical relief, medical teaching, training of nurses and midwives, X-Ray and laboratory technicians and research, etc. Since the beginning of the Second World War, i.e., since 1939, the Department has taken many strides in development.

Facilities for Hospitalisation.—The population of the Bombay State is 3,59,44,000. The position about the availability of the number of beds for general diseases for hospitalisation is as follows:—

—	At the beginning of the First Five-Year Plan.	At the end of the First Five-Year Plan period, i.e., 31st March 1956.	Probable during and at the end of the Second Five-Year Plan period, i.e., 31st March 1961.
General beds ...	9,422	9,750	11,910
Ratio of beds to population.	1 bed to 3,815 population or 0·206 beds for 1,000 population.	1 bed to 3,686 population or 0·207 beds for 1,000 population.	1 bed to 2,682 population or 0·307 for 1,000 population.

These are spread all over the State, in Greater Bombay, District Headquarter Hospitals, Cottage Hospitals and dispensaries in Taluka Towns and rural areas. Some of the hospitals are attached to Medical Colleges and are utilised for teaching purposes. In every District, the Civil Hospital at Headquarters constitutes the standard permanent official organisation for medical relief for the whole District.

Cottage Hospitals.—These serve as a link between the dispensaries, Subsidised Medical Practitioners Centres and the District Headquarter Hospitals. At the beginning of the First Five-Year Plan, there were in all 7 Cottage Hospitals,

BOMBAY STATE

VITAL STATISTICS

Birth Rate and Death Rate (Per 1000 Population)

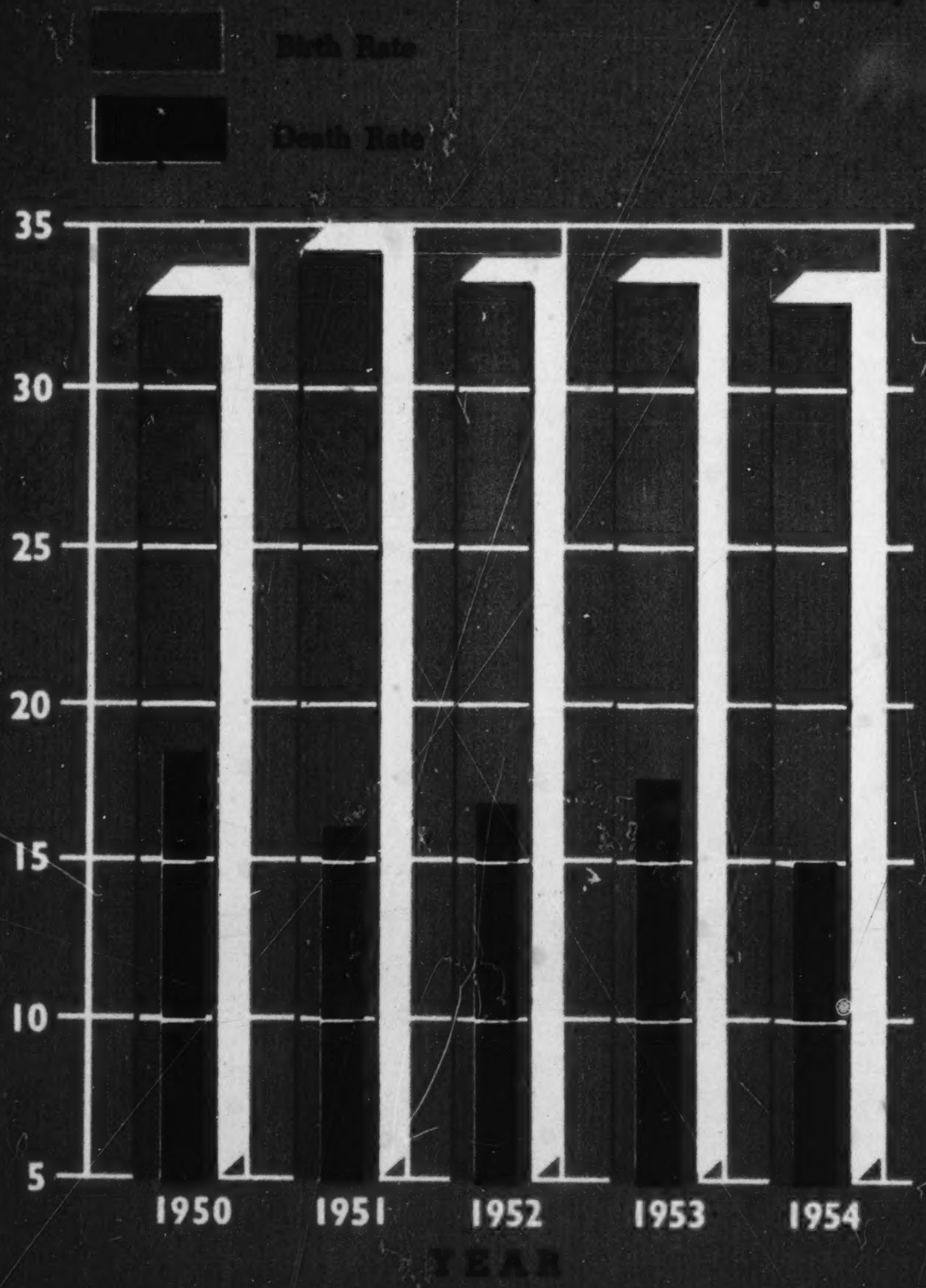


PLATE IV

BOMBAY STATE

MEDICAL FACILITIES

Number of Hospitals and Dispensaries and Number of Beds

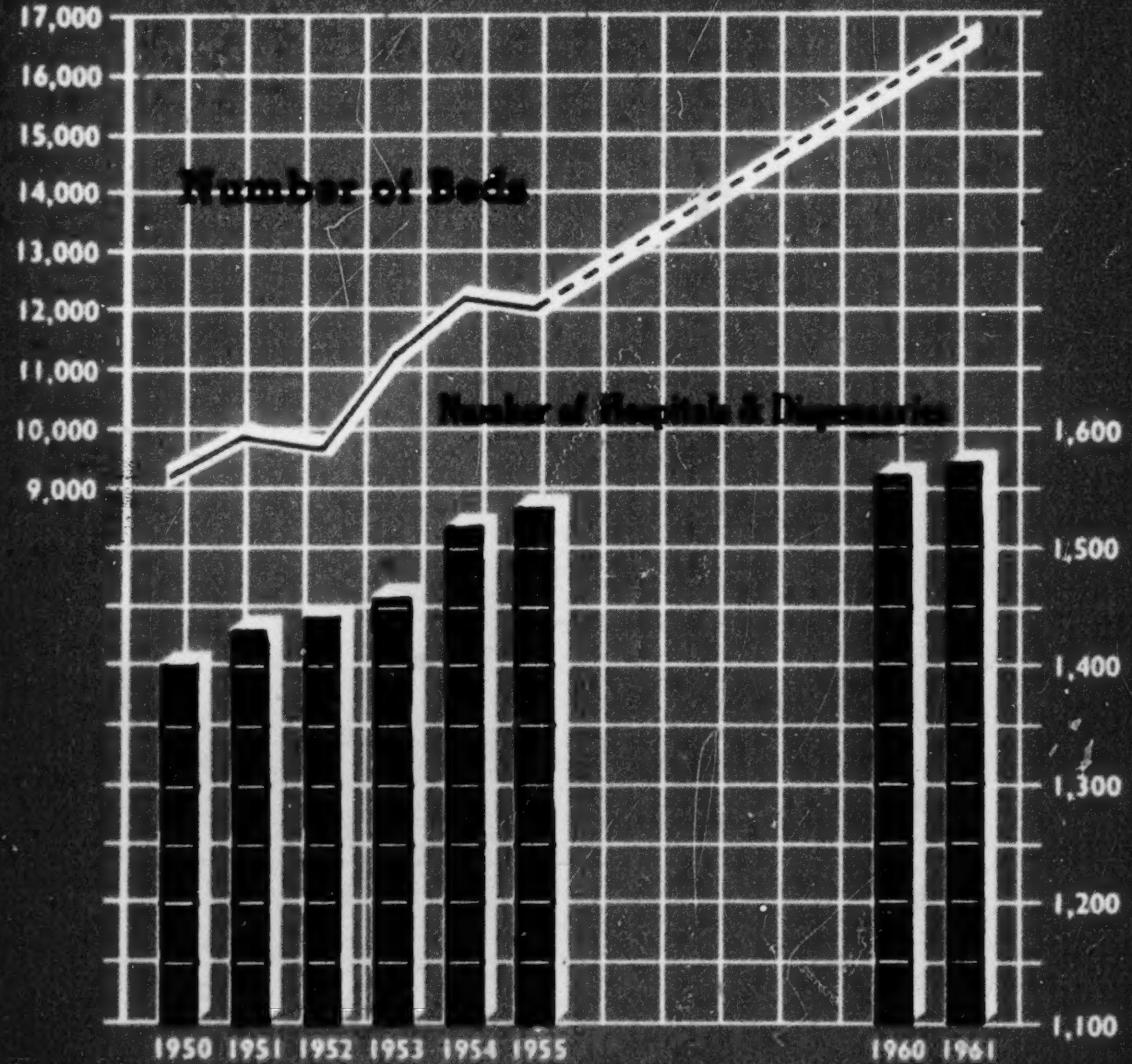


PLATE V

During the First Five-Year Plan, one Cottage Hospital has been opened and 2 more are under construction. Seven Cottage Hospitals will be opened during the Second Five-Year Plan period.

Number of Hospitals and Dispensaries, etc.—The total number of Hospitals and Dispensaries in Bombay State in 1951 was 1352. At the end of the First Five-Year Plan, it is estimated to be about 1,550. During the Second Five-Year Plan period the existing Civil and District Hospitals will be expanded so as to provide 145 additional beds. In addition a new Hospital of about 400 to 500 beds will be opened in Bombay City for the benefit of the industrial workers covered by the Employees' State Insurance Scheme.

Beds for Special Purposes

	In 1950		Estimated at the end of First Five-Year Plan i.e., 31st March 1956.		Estimated at the end of Second Five-Year Plan i.e., 31st March 1961.	
	Number of Hospitals.	Accommodation.	Number of Hospitals	Accommodation.	Number of Hospitals.	Accommodation.
Mental Hospitals ...	6	2,354	6	2,354	6	3,354
Leprosy Hospitals ...	7	2,163	19	2,313	19 plus 10 Leprosy Control Centres.	2,513
T. B. Hospitals ...	19	2,052	19	2,052	20	2,227

The schemes regarding expansion and construction of new hospitals and dispensaries proposed in the Second Five-Year Plan include the following:—

		Beds.
1.	Establishment of 7 new Cottage Hospitals ..	140
2.	Expansion of certain Civil Hospitals which are overcrowded to provide additional beds (including reconstruction of 3 Civil Hospitals)	95
3.	Increase in the number of beds at District Head quarters Hospitals	50
4.	One Hospital of 400 to 500 beds under Employees' State Insurance Scheme.	400 to 500
5.	Expansion of accommodation for leprosy patients in certain Leprosy Hospitals and increased treatment facilities for leprosy patients in Bombay State and opening of 10 additional Leprosy Control Centres	200
6.	Expansion and construction of new Mental Hospitals ..	1,000
7.	Expansion of facilities for the treatment of T. B. (including expansion of T. B. Hospitals at Aundh by 175 beds and one T. B. clinic.)	175
	Total additional beds	2,060 to 2,160

It is also proposed to start work on the establishment of a Medical College and Hospital at Hubli and on reconstruction of the J. J. Hospital at Bombay. These schemes will have to be carried over to the Third Five-Year Plan as the outlays involved are large. Nearly 700 beds will be added when these two schemes are completed.

In addition to the proposed schemes for expansion and construction of new hospitals and dispensaries, various other schemes for improvement and increasing the efficiency of the Hospitals and dispensaries etc. have been included in the Second Five-Year Plan. They are detailed below :—

(1) Gradual conversion of B. M. S. Class III posts into B. M. S. Class II posts, as on account of the closure of the Licentiate Medical course, there is a great shortage of Licenciate doctors.

(2) Provision of X-Ray Plants at Civil Hospitals.

(3) Provision of Ambulance service to District Headquarter Hospitals.

(4) Provision of proper drainage, water supply, electricity, quarters for staff and Dharmashalas at Civil Hospitals.

(5) Control of T. B. by mass miniature radiography.

Under the First Five-Year Plan the following schemes for education and training were provided :—

(1) Establishment of Medical Colleges at Poona and Ahmedabad.

(2) Medical College, Baroda.

(3) Ahmedabad Nursing College.

(4) Creating a cadre of Technicians for X-Ray and Laboratory work.

Out of the above schemes Nos. (1), (2) and (4) have been completed although, only certain portion of the building works in connection with the Medical Colleges at Poona and Ahmedabad, is yet to be completed. This will be done during the Second Plan period.

The College of Nursing at Ahmedabad, which was already functioning was, however, closed as a measure of retrenchment.

In order to expand the training facilities the following schemes have been proposed in the Second Five-Year Plan :—

(1) Establishment of Medical College and Hospital at Hubli.

(2) Establishment of a College of Nursing for higher education in Nursing.

(3) Training and employment of additional X-Ray and Laboratory Technicians.

(4) Appointment and training of additional Nurses, Midwives and Health Visitors.

(*a*) The Medical College at Hubli will provide additional accommodation for 50 students per year on completion. The increase in the admissions on account of this College will result in the Third Plan period.

(*b*) *Establishment of College of Nursing.*—At present there are no facilities for higher and post-graduate training in Nursing, with the result that candidates have to be deputed for training at the Colleges of Nursing at Delhi and Vellore. This involves heavy cost and imposes a limitation on the number of persons trained. The proposed establishment of a College of Nursing in Bombay State will fulfil a long felt need and will also improve the status and efficiency of nursing service.

(c) *Training and employment of additional X-Ray and Laboratory Technicians.*—This scheme is a continuation of the scheme in the First Five-Year Plan, under which 24 additional Technicians (about 12 Laboratory and 12 X-Ray technicians) will be trained and employed at the various Government Hospitals in Bombay State.

(d) *Appointment and training of additional Nurses and Midwives.*—Already there is a shortage of trained nurses and midwives. With the establishment of new institutions during the period of the Second Five-Year Plan, the number of trained personnel required will have to be considerably increased. It is, therefore, proposed to appoint additional trained staff of 60 Nurses and Midwives to fill the present shortage. Additional staff required for new institutions has been provided under the respective schemes.

Other improvements in Education and Training.—The following additional schemes are also proposed in the Second Five-Year Plan in order to improve the existing facilities at the training institutions :—

(i) *Conversion of Honorary Posts in Government Colleges and Hospitals attached thereto into full-time doctors and Teachers.*—This is necessary in order to improve the under-graduate and post-graduate teaching in Medical Colleges. Nearly 22 full-time doctors and teachers will be appointed.

(ii) *Starting of refresher course in certain specialities such as (i) T. B. (ii) Leprosy etc.*—These courses will improve the efficiency of the existing Medical Officers to keep themselves abreast of the modern trends of treatment. Two refresher courses will be organised each year.

(iii) *Facilities for imparting post-examination training for medical students, etc.*—In the revised M.B.B.S. course introduced by different Universities, a post-examination training for a period of one year (of which 3 months are to be done in Public Health training including rural areas) is to be done, before a student is granted a degree of M.B.B.S. The scheme is intended to provide for these facilities. Training facilities for about 300 to 400 trainees will be provided during the Second Plan period.

(iv) *Upgrading of Department in Medical Colleges and attached Hospitals.*—There are certain departments at the Medical Colleges and their attached Hospitals, which are not up to the required standard for teaching purposes on modern lines. A sum of Rs. 5 lakhs has, therefore, been specially provided to improve and bring these departments to a reasonable standard in order to improve the teaching of the medical students both under-graduates and post-graduates. A part of this provision will also be utilised for medical research.

Pharmaceutical Education and Pharmaceutical Service.—In order to fulfill the requirements of the provisions of the Pharmacy Act, 1948, and the Rules thereunder the following schemes for improvement of Pharmaceutical Education and Pharmaceutical Service in Bombay State, have been proposed in the Second Five-Year Plan :—

(1) Institution of a Training School in Pharmacy leading to Diploma in Pharmacy. About 40 students will be admitted annually at the proposed institution.

(2) Appointment of trained Pharmacists at the Government Hospitals and Dispensaries. Provision is made for appointment of 30 such pharmacists during the Second Plan period

Tuberculosis.—In addition to the provision of additional hospitalisation facilities for the treatment of T. B., the following two additional schemes have been proposed in the Second Five-Year Plan, for combating T. B. :—

(i) *Control of T. B. by use of mass miniature radiography and the treatment in the annexed type of hospitals.*—This facility is provided at present by one private Institution and does not meet the requirements of the whole State. Provision of this facility by Government for the general public is therefore essential.

(ii) *Continuance of B. C. G. Vaccination Scheme.*—The scheme is already in force in a limited area of the State and will be continued during the Second Five Year Plan priod in order to expand its activities over the whole State.

Establishment of Health Laboratories.—At present proper facilities for diagnostic purposes both for medical and Public Health do not exist. It is, therefore, proposed to provide a Health Laboratory which will serve the needs of both the Medical and Public Health Departments, the latter for examining water samples, etc.

Indigenous Systems of Medicine.—It has been generally recognised that treatment of allopathic system of medicine is costly and poor class of people cannot afford it. Besides adequate number of allopathic practitioners are not available to meet the requirements to the full extent. In view of this and in order to encourage the indigenous systems of medicine, the following schemes of Ayurved have been proposed for inclusion in the Second Five-Year Plan at an aggregate cost of approximately Rs. 9·50 lakhs :—

Scheme	Estimated cost for 5 years (Rs. in thousands)
1. Research in Ayurved	150
2. Pharmacy Storage of Ayurvedic Herbs ...	50
3. Starting of an Ayurvedic Museum	100
4. Starting of Ayurvedic Dispensaries in Rural areas ...	(Cost will be met from the National Extension Service Funds.)
5. Preparation of books and reference books on Ayurved.	150
6. Grants to Ayurvedic Teaching Institutions ...	500
Total ...	950

PUBLIC HEALTH

Health organisation in the State of Bombay is of comparatively recent evolution. Barring the larger Corporations and Cities, fifteen years ago vaccination against small-pox was almost the sole activity of the Public Health Department and for the rest a few high-placed officers at the State level advised revenue officers and local bodies in the control of epidemics and sometimes in a few other health measures. The first District Health Scheme was introduced as an experimental measure only in 1942 in the three districts of Bijapur, Sholapur and Surat. Besides these two District Local Boards—Satara and Dharwar—employed their own District Health Officers. Since then the District Health Scheme has been extended throughout the State, and in each District there is a skelton Public Health staff consisting of a District Health Officer, an Epidemic Medical Officer and three to four Sanitary Inspectors. In each Taluka there are two Vaccinators, and in many of them one of the posts of Vaccinators is held by a qualified Sanitary Inspector designated as Sanitary Sub-Inspector. In each Taluka there is a sanitary squad of four persons.

At head-quarters the Director of Public Health functions as the Head and is assisted by 5 functional Assistant Directors of Public Health, one for malaria, one for the Public Health laboratory, one for the vaccine institute, one for maternity and child health and one for vital statistics and epidemiology. There are also three regional Assistant Directors of Public Health.

The Important activities of the Public Health Department most of which were a part of the First Five Year Plan are indicated below :—

1. *Mobile units.*—For the specialised control of epidemics 3 Mobile Hospital Units have been established each with accommodation for 50 beds in tents, and with a staff of one Class II Medical Officer, 2 Class III Medical Officers, 8 nurses, 4 male and 4 female ward attendants, 5 sweepers, 5 other Class IV servants, a compounder, a clerk and two transport vehicles with drivers and cleaners. In addition there are 9 Mobile Hygiene Units including 2 in Dangs District. These latter Units have 1 Epidemic Medical Officer, 1 Sanitary Inspector and a sanitary squad equipped with transport and a driver and a cleaner. The other Units consist only of a Sanitary Inspector and a sanitary squad equipped with transport and a cleaner and a driver.

2. *Combined Medical and Public Health Units.*—While normally curative medical relief is provided separately under the control of the Medical Department and Preventive measures are undertaken by the Public Health Department separately the nearest approach to providing integrated curative and preventive medical relief has been made in this State with the establishment of 23 Combined Medical and Public Health Units each staffed with a subsidised Medical Practitioner, a Health Visitor, a Midwife, a trained Dai, a Woman Attendant, Health Assistant and a Sanitary Squad. One more Unit was sanctioned during 1954 and 2 more have been sanctioned in 1955. Each Unit serves about 7 to 10 villages with a population of 7,000 to 10,000 within a radius of five miles of the headquarters.

3. *Sirur Health Unit.*—For the purpose of demonstrating intensive health measures and for providing training facilities for health personnel at various levels, a Health Unit was established at Sirur with aid from the Rockefeller Foundation in the earlier stages, and the Unit has been functioning since 1939 in an area comprising 32 villages with a population of about 50,000. The staff consists

of a Medical Officer of Health, a Woman Medical Officer, a Public Health Nurse, 4 Health Visitors, 8 Midwives, 4 Sanitary Inspectors, 2 Clerks and 7 Class IV servants and transport fitted with material for health education with a driver and a cleaner.

4. *Collection of Vital Statistics.*—Vital statistics were till recently compiled in the offices of the three regional Assistant Directors of Public Health from the monthly reports received by them directly from municipalities and from Mamlatdars of Taluka who used to forward the returns received from the police patils of individual villages. This work has now been centralised at the State level under a full-time Assistant Director of Public Health in charge of Vital Statistics and Epidemiology, and the process of compilation and consolidation has been mechanised. A Statistician in Classs II scale will soon be appointed.

5. *Maternity and child health.*—Some work in this field is being done by an honorary organisation called the Bombay Mothers and Children Welfare Society which receives substantial grants from the Government of Bombay. This Society also undertakes the training of Health Visitors, Midwives and Dais, besides maintaining 24 Centres for maternity and child health service. About 6 centres are in operation in the Sirur Health Unit. Thus, altogether there were about 56 maternity and child health centres in the State established by Government or with grant-in-aid from it providing maternity and child health service in all its phases. This, however, does not include maternity service through private maternity homes and private Government aided institutions. A proposal to intensify the activities in this field has been implemented recently in collaboration with the United Natious International Children's Emergency Fund, the World Health Organisation and the Government of India, including training, maternity and child health service integrated with preventive and curative medical relief in Primary Health Units and some facilities for the improvement of pediatrics. As part of this programme, 103 new maternity and child health centres have been set up. Sanction has also been accorded for the establishment of 25 more Units at the rate of one in each of the 25 Districts in the State other than Poona and Baroda. A full time Woman Assistant Director of Public Health in charge of Maternity and Child Health forms part of the scheme and has been appointed as stated earlier. The training programme has already commenced and about 60 Nurses-Midwives are under training and about an equal number of Midwives will also soon complete such training. The international consultant personnel are expected. Transport facilities promised by the international personnel have been received and equipment is expected shortly.

6. *Training of health personnel.*—Health Officers are trained in the Diploma in Public Health Course in Bombay. Four posts of Professors of Preventive and Social Medicine have been sanctioned in all the four Government Medical Colleges in the State and two posts have been filled. Nurses are trained by Government and Health Visitors and Midwives are trained by the Bombay Mothers and Children Welfare Society and in Government hospitals. In addition, these personnel before employment in maternity and child health service attached to the Primary Health Units are given a further course of orientation in health in the Sirur Health Unit. Sanitary Inspectors are trained by the Bombay Municipal Corporation, the Ahmedabad Municipal Corporation and the Government of Bombay. All the subsidised medical practitioners in the State are being trained in batches in the Sirur Health Unit in Health orientation for a period of three months.

7. *Malaria and Plague control.*—The outstanding activities of the Department during the last decade are in the field of malaria and plague. The Malaria Organisation created in 1942 has steadily expanded and since 1953 all the malarious parts of the State are included in a State-wide Malaria Control Scheme as part of the National Malaria Control Programme. 19 units are in operation. The total malaria budget is a little over Rs. 70 lakhs out of which the Government of Bombay's share is Rs. 30 lakhs. About 20 million people out of a total of 36 million actually receive the direct benefits of this scheme. The entire population, however, receives its indirect benefits. More than 2 million cases of malaria have been saved in each of the years 1953 and 1954 as a result of this campaign. Plague has been entirely eradicated largely due to the DDT campaign primarily undertaken as a malaria control measure and partly also to special steps taken in those Districts in which DDT is not being sprayed as part of the Malaria Control Programme but which used to be endemic for plague.

8. *Vaccine Institute.*—The Vaccine Institute plays an important part in the control of small pox and in the preparation of vaccine lymph. About five million doses of vaccine lymph are prepared and distributed throughout Bombay State and to some extent outside the State as well. Recently, sheep have been substituted for the preparation of vaccine lymph in place of cow calves.

9. *Public Health Laboratories.*—The two Public Health Laboratories at Poona and Baroda are primarily utilised for the implementation of the Bombay Prevention of Food Adulteration Act which is now in operation in 95 Municipalities in the State.

Health service in the Second Plan Period.—The trends indicated above point the way to the formulation of the plan for the Second Five Year period. The most important objective is the improvement of environmental sanitation for which water supply and drainage schemes are proposed to be undertaken at a total estimated cost of about Rs. 12·50 crores. The details are given in the next section under water supply and drainage :—

(1) Reorganisation of the Directorate of Public Health so as to provide for a number of functional bureaux in order that training, research and health administration can radiate from this centre. During the Second Plan period provision is made for the building only.

(2) The establishment of multi-purpose Primary Health Units throughout the State, making use of existing medical institutions and public health staff and providing for additional medical and health personnel. The ultimate goal is the complete decentralisation of all curative and preventive medical services and making these Primary Health Units responsible for every kind of service with adequate provision for supervision.

(3) Reorganisation of the District Health Scheme and the integration of all health activities.

(4) Training of various personnel. The Civil Surgeon will be trained in public health and District and Divisional Medical Officers of Health will be trained in hospital administration in order that the contemplated amalgamation at all levels can be effectively undertaken during the Third Five Year Plan. Other facilities for training of medical men in public health, sanitary inspectors, nurses, health visitors, midwives and facilities for training in leprosy, nutrition and tuberculosis will also be provided.

(5) The State-wide Malaria Control Scheme will be continued on the same basis as in the First Five Year Plan. The quantities of insecticides, however, may be gradually reduced.

(6) Provision has been made for the establishment of 3 more Mobile Hospital Units and the continuance of the 3 existing ones.

(7) Providing assistance to the Department of Social and Preventive Medicine in the four Government Medical Colleges in the State with the establishment of three Health Units on the lines of Sirur Health Unit.

(8) Control of Filariasis.

WATER SUPPLY AND DRAINAGE

(1) *Water Supply and Drainage.—Government Works.*—31 Government schemes were taken up for execution during the First Plan period. Out of these 20 works have been completed and the remaining 11 works will have to be completed during the Second Five Year Plan. An amount of Rs. 93,00,000 in round will be required for completion of these 11 schemes during the Second Plan period. In addition other works which have already reached advanced stages of execution will require about Rs. 31 lakhs for completion. A total provision of Rs. 124 lakhs has thus been made in the Plan for completion of these schemes.

It is also proposed to undertake seven new schemes in Urban areas and 9 minor works of improvements to existing works at a cost of Rs. 50 lakhs. There are at present no arrangements for regional piped water supply in rural areas where provision of independent water supply schemes is not possible. Areas like Bhal tract in Ahmedabad and Amreli Districts and Kharepat areas of the Kolaba District are suffering for want of safe water supply for a long time. There are also such areas in several other Districts of the State, where provision of water supply from wells and tanks is not feasible and regional water supply from assured sources is the only alternative. Accordingly 7 schemes in rural areas will be executed as Government works, for which a grant of Rs. 58·50 lakhs is expected to be received from the Government of India.

(2) *Subsidised Water Supply Schemes for (i) Borough Municipalities, (ii) District Municipalities and (iii) Village Panchayat areas.*—At present Government gives grants ranging from 33⅓ per cent. to 50 per cent. of the cost to District and Borough Municipalities and Village Panchayats for piped water supply schemes in addition to schemes directly undertaken by Government. Several works taken up by the Local Bodies under this grant-in-aid scheme are in progress. It is expected that about 46 such schemes will be at different stages of completion at the end of the First Plan period and it will be necessary to provide for their completion during the Second Five Year Plan period. It is further proposed to extend the benefit of this scheme to new areas and to give grants on the same basis for additional schemes to be taken up by local bodies during the Second Plan period.

These new schemes will provide for drainage and water supply facilities in cities and towns. The total cost to Government on account of grant-in-aid for completion of the schemes in progress and additional new schemes framed by the local bodies will come to Rs. 3,46,00,000 as explained below :—

(*i*) *Water Supply Schemes for Borough Municipalities.*—There are at present 50 schemes under execution out of which 28 have been completed by the end of the First Five Year Plan and the remaining 22 schemes are proposed to be completed during the Second Five Year Plan period. In addition six new schemes framed by the Borough Municipalities at a cost of Rs. 53·62 lakhs will be taken up. The total grant for completion of 22 works in progress is estimated at Rs. 326·76 lakhs,

BOMBAY STATE
VITAL STATISTICS
Deaths by Cholera, Smallpox and Plague

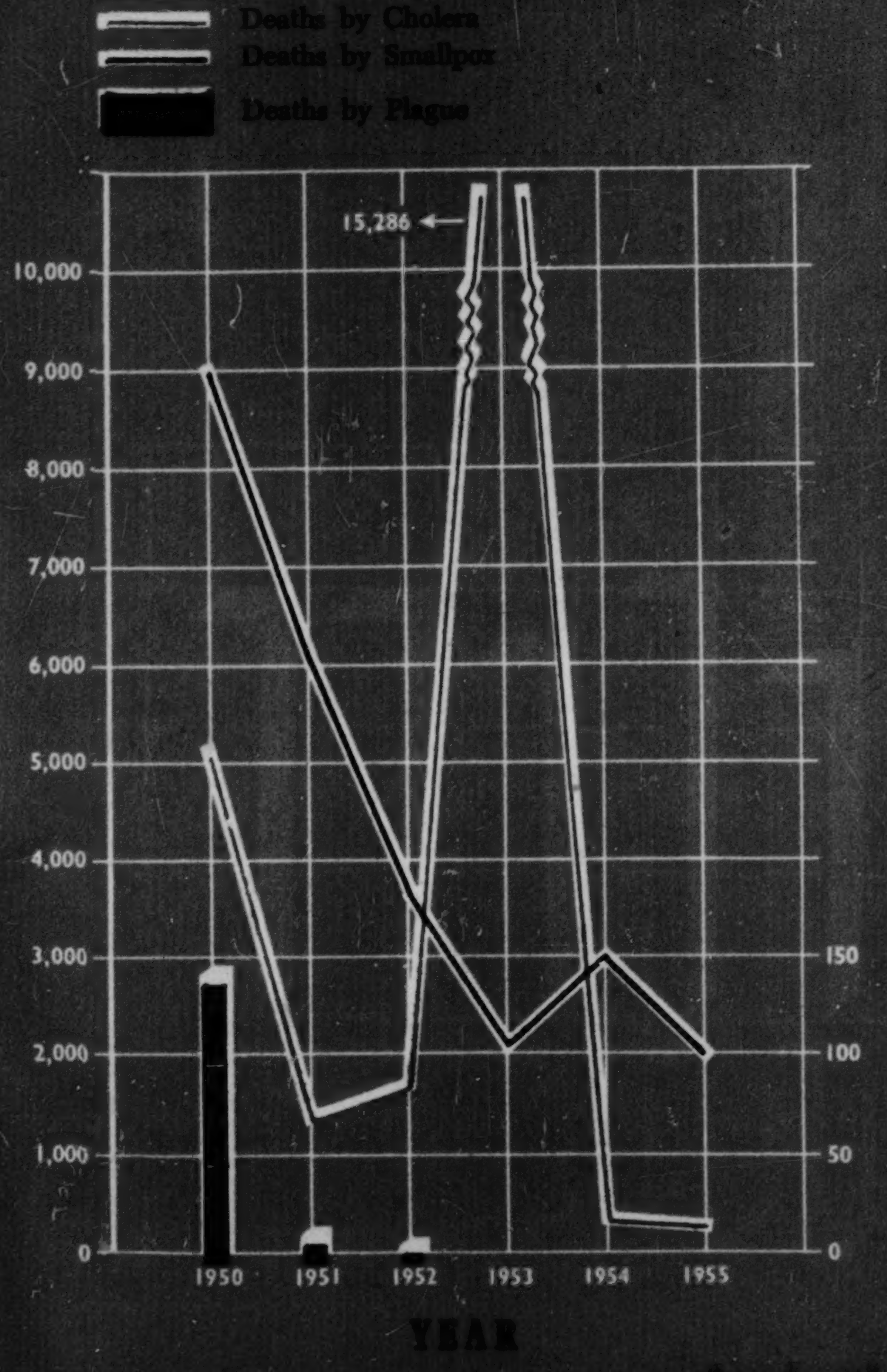
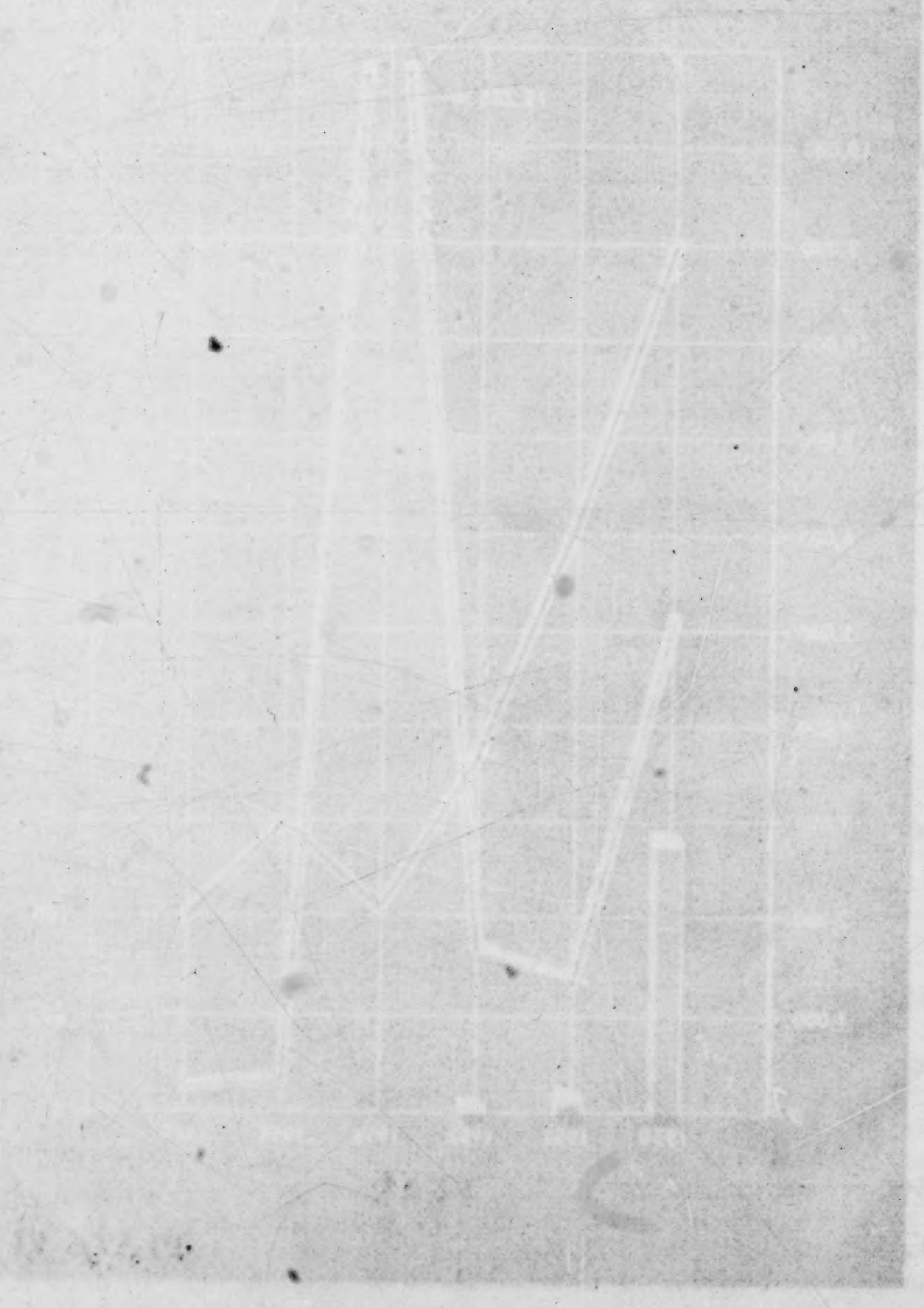


PLATE VI

BOMBAY STATE
VITAL STATISTICS
Deaths by Cholera, Smallpox and Plague



BOMBAY STATE
VITAL STATISTICS
Deaths by Malaria

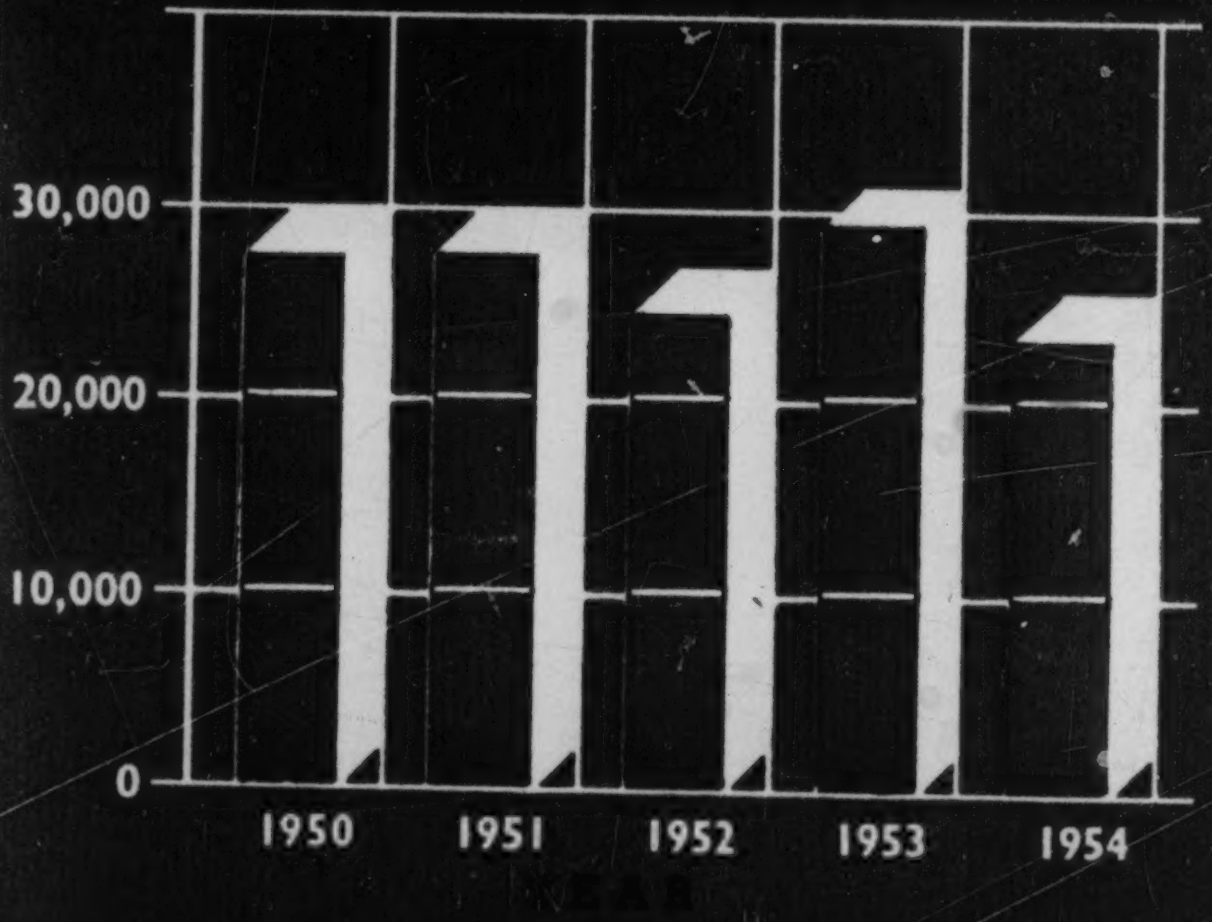


PLATE VII

(*ii*) *Water Supply Schemes for District Municipalities.*—There are at present 38 schemes under execution and of these 23 schemes have been completed by the end of the First Five Year Plan. The remaining 15 schemes are proposed to be completed during the Second Five Year Plan. The cost of the works to be completed is Rs. 88·81 lakhs. In addition a provision of Rs. 274·28 lakhs will be required for sanctioning new schemes framed by the various District Municipalities.

(*iii*) *Water Supply Schemes for Village Panchayat areas.*—Out of 27 schemes which are in progress 18 works have been completed by the end of the First Five Year Plan. The remaining 9 schemes are proposed to be completed during the Second Plan period at a cost of Rs. 13·15 lakhs. In addition several village panchayats have framed new schemes. The total amount of grant to be paid by Government for these schemes will be Rs. 68·00 lakhs.

The total cost of the 150 water supply schemes for local bodies including the cost of completion of 46 schemes in progress is estimated to be Rs. 824·62 lakhs.

As all these works may not be completed during the period of the Second Five-Year Plan an *ad hoc* provision of Rs. 264 lakhs is made in the Second Plan for works in progress and a further provision of Rs. 82 lakhs is included for new schemes.

(3) In addition to the above projects separate provision is made for the following major municipal water supply schemes :—

	(Rs. in crores).	
(*i*) Khadakwasla Water Supply Scheme ..	1·50	(In addition Rs. 25 lakhs will be found by the Poona Municipal Corporation).
(*ii*) Rakakop Water Supply Scheme for Belgaum.	1·00	
(*iii*) Tansa-Vaitarna Scheme for Bombay City.	2·50	
Total ..	5·00	

(4) *Village Water Supply.*—During the First Five-Year Plan a provision of Rs. 415 lakhs was made for the village water supply works. Government has been spending nearly Rs. 40 lakhs annually on village water supply schemes. The works include construction of new wells and tanks and repairs to old ones, etc. During the acute scarcity of drinking water in villages, Government has declared its policy to provide at least one well in a village with a population of 200 and above, and in villages in backward areas with a population of 100 and above. Preference is, however, given to villages which contribute 25 per cent. of the cost of construction.

Village water supply schemes are also undertaken under the Community Development Projects and National Extension Service Programmes and the Local Development Works Programme under which such schemes are taken up with contributions from the villagers.

During the Second Plan period the programmes for extension of the Community Development Projects and National Extension Service will be expanded so as to cover the entire State by National Extension Service at the end of the Plan period and about half the area of the State by Community Development Projects. Similarly the Local Development Works Programme will be expanded. Provision of drinking water supply in villages will therefore be increasingly made under these programmes. In addition a total provision of Rs. 120 lakhs has been included in the Plan for construction of wells in villages which have no wells and villages which will not be immediately covered by the Community Development Projects and National Extension Service and for completion of wells which are in progress.

CHAPTER X

HOUSING

With the advent of the Post-War and Post-Independence industrial and commercial developments in cities and towns of the State more and more people migrated from the neighbouring villages and came to settle in the cities and towns to earn their livelihood. This migration, along with the mass-migration from Pakistan gave rise to the keen necessity for housing these people. The magnitude of the problem was so great that it was beyond the capacity of any single agency to solve the problem individually. Shortages of building materials also called for Government intervention in the building industry.

The Government of Bombay therefore set up a State Housing Board as early as in the year 1947 for formulating and executing housing schemes particularly in urban areas like Bombay, Ahmedabad and Sholapur which were suffering from acute housing shortages. As the work was growing rapidly it became necessary to set up a statutory Housing Board and accordingly the Bombay Housing Board was constituted under the Bombay Housing Board Act, 1948. This Board is empowered to take up schemes for construction of tenements from the loans advanced by the Government for the purpose. It will be seen that long before the commencement of the First Five-Year Plan the State Government had taken steps to relieve the housing shortage. With the assistance from the State Government, the Housing Board constructed 2,743 tenements for industrial workers and 4,317 other tenements including converted military hutments for low income groups at a total cost of Rs. 4·04 crores incurred prior to the First Five-Year Plan. With the Central assistance in the form of loans and latterly subsidies which became available for the industrial housing scheme during the First Five-Year Plan period further 9,676 tenements were completed and work on construction of 3,886 additional tenements is in progress. The details of the progress during the First Plan period are given below :—

Place		Number of tenements completed	Number of tenements in progress
A. *Old Industrial Housing*—			
Bombay	...	720	......
Ahmedabad	...	120	......
B. *Subsidised Industrial Housing Scheme*—			
Bombay	..	4,728	1,986
Ahmedabad	..	3,908	1,650
Poona	..	100	......
Sholapur	..	100	......
Jalgaon	..	......	100
Surat	..	......	100
Nadiad	..	......	50
Total	..	9,676	3,886

The tenements constructed and those under construction under the Subsidised Industrial Housing Scheme are as per type designs sanctioned by the Government of India. The tenements at Bombay are multi-storeyed R. C. C. structures whilst those at Ahmedabad and at other places are ground floor structures with B. B. masonry walls and R. C. C. slab roofs. Each tenement consists of a living room, kitchen, bath and common latrines at the rate of one for every two tenements.

In the Second Five-Year Plan a total provision of Rs. 7·5 crores has been made for the Industrial Housing Scheme of which nearly Rs. 7·15 crores would be earmarked for direct construction through the Housing Board and for meeting the capital short-fall due to the difierence between the actual cost and the ceiling cost of construction. Nearly 16,825 tenements in important industrial centres like Bombay, Ahmedabad, Sholapur, etc., will be constructed during the Second Plan period. In addition loans and subsidies amounting to about Rs. 35 lakhs will be given to Co-operative Housing Societies of industrial workers. About 1,700 tenements are expected to be constructed through Co-operative Housing Societies during the Plan period.

During the period of the First Five-Year Plan, the Government of India have also formulated for implementation by the State Government, a scheme known as the Low-Income Group Housing Scheme. The Scheme envisages grant of financial assistance to persons belonging to the low-income group, i.e. persons whose income does not exceed Rs. 6,000 per annum. For this purpose, the Central Government will advance long-term loans to State Government which will pass on these loans to the low-income groups. The Scheme also contemplates grant of loans to local bodies for their low-paid staff and acquisition and development of sites for sale to intending house-builders belonging to the low-income groups. It is proposed to extend this scheme to the entire period of the Second Five-Year Plan. A provision of Rs. 3·5 crores has been made for grant of loans as envisaged under the scheme. Loans for Backward Class Co-operative Housing Societies will be given from this provision. In addition a separate provision of Rs. 2 crores is proposed for construction of quarters for Class III and Class IV servants of Government. For the present, the Scheme is proposed to be confined to the urban or municipal areas, where housing shortage is acute. Later, in the light of experience other areas will be brought within the scope of the Scheme. For housing Gazetted Government Officers in Bombay City a further lump provision of Rs. 1 crore has been made.

The Government of Bombay has already undertaken to contribute to the share capital of the Bombay Co-operative Housing Finance Society to the extent of Rs. 50 lakhs. The Finance Society advances loans to Co-operative Housing Societies for construction of houses. So far loans to the extent of about Rs. 84 lakhs have been sanctioned by the Society to 47 Co-operative Housing Societies. The membership of the Housing Finance Co-operative Society has steadily increased to 144 members and the share capital has increased to about Rs. 68 lakhs. By the end of the First Plan period the State Government will have contributed about Rs. 34 lakhs to the Finance Society. A provision of Rs. 16 lakhs is included in the Plan to enable the Government to contribute the balance of the promised contribution during the Second Plan period.

Housing and Slum Clearance are composite problems. Though the industrial housing scheme on which considerable progress has been made in this State must have contributed to a certain extent to clearance of slums, in industrial localities the problem facing the larger urban municipalities like Bombay, Ahmedabad and

Poona is of such a magnitude that without adequate Government assistance it would be difficult for the municipalities to tackle it. These three municipalities have framed comprehensive slum clearance schemes. A block provision of Rs. 681·75 lakhs has been made in the Plan for grant of assistance to local bodies for their slum clearance schemes and miscellaneous schemes. In order to speed up the development and improvement of the areas within the jurisdiction of the local bodies, the Bombay Town Planning Act has been amended so as to provide for preparation of development plans of towns within a period of four years from the date of coming into force of the Act. As the various smaller local bodies have no adequate personnel for preparing such plans it is proposed to help them by getting the plans prepared through Government Departments.

Mention may also be made here of the housing schemes for displaced persons which are dealt with in the Chapter on Rehabilitation. For the various administrative buildings which may have to be constructed owing to the expansion of several Government Departments a lump provision of Rs. 1·5 crores has been made in the Plan.

CHAPTER XI.

OTHER SOCIAL SERVICES

LABOUR AND LABOUR WELFARE

With the constitution of a statutory Labour Welfare Board in this State several Labour Welfare Schemes are now administered directly by the Board. These are described in the section on Labour Welfare below. The main development activities with which the State Government has been concerned during the First Five-Year Plan period are : (*i*) Research into industrial diseases and hazardous occupations, (*ii*) Institute for training of Labour Welfare workers, (*iii*) Government Industrial Training Workshops and (*iv*) Decasualisation Scheme for textile workers.

A brief account of the work done during the First Five-Year Plan is given below. The directions in which it is proposed to expand the existing activities and undertake new ones are also indicated.

LABOUR

Extension of the Employees State Insurance Scheme.—The Employees State Insurance Scheme which was inaugurated on 2nd October 1954 in Bombay City covers the factory workers of Greater Bombay numbering about 4·25 lakhs. At present the scheme is made applicable to the workers only. There is, however, a demand from the workers to extend the benefit of the scheme to the members of their families also. It is, therefore, proposed that the scheme be extended to the members of the families of the insured workers in Bombay City and also to extend the scheme to the workers and their families at Ahmedabad and Sholapur, during the period of the Second Five-Year Plan.

Supervision over the administration of the Bombay Shops and Establishments Act, etc.—At present the Bombay Shops and Establishments Act is being administered by the local bodies through the Inspectors appointed under it. With the extension of the Payment of Wages Act to all the Shops and Establishments in the important places in the State, the Inspectors under the Bombay Shops and Establishments Act have been appointed Inspectors under the Payment of Wages Act, also. With a view to seeing that the provisions of both these Acts are properly enforced, it is essential to have proper supervisory machinery over the Inspectors. A number of complaints from the employees working in Shops and Establishments are being received about violation of the provisions of the Bombay Shops and Establishments Act and the scheme envisages establishment of a proper machinery to remove causes for such complaints.

Socio-Economic Surveys etc.—The surveys relating to wage census, family budgets, etc. were conducted by this Government several years ago. The data collected under those surveys have become out of date. It is also essential to conduct additional surveys like effect of enforcement of the Minimum Wages Act, working conditions of workers in different industries etc. Collection of statistics under the Industrial Statistics Act is a statutory responsibility, and it is essential to collect regular data about employment, etc. in certain industries for being transmitted to the Government of India. Establishment of a permanent machinery to achieve all the objectives mentioned above is therefore contemplated under the Second Five-Year Plan.

Research into Industrial Diseases and Hazardous Occupations.—The industrial worker is exposed to several occupational diseases and hazards emanating from the factory processes, e.g. lead poisoning, toxicity, lung cancer, etc. As information for prevention and cure of such Industrial diseases and occupational hazards in this country was not available a scheme for research in this field was sanctioned in 1947–48 under the Post-War Reconstruction and Development Programme with a view to evolving an industrial health service in the State. A Medical Inspector of Factories who is assisted by a Laboratory Assistant is responsible for conducting research in this field.

A number of factories located outside Bombay City have yet to be surveyed. Besides, several factories have to be visited before the nature of the problem is determined and a solution found out. For this purpose the Medical Inspector of Factories will need assistance of Inspectorial staff as the presence of the Medical Inspector in the laboratory in Bombay is necessary. It is also proposed to expand the scope of the laboratory to enable the Medical Inspector to undertake bacteriologica investigations into hazards of biological nature like anthrax, tetanus, brucellosis, leptospira, tubercule, etc. Preventive action can be taken only when all particulars of incidence and cause are known. For this type of research a bacteriological section will be added to the existing laboratory.

Decasualisation Scheme for Textile Workers.—The Decasualisation Scheme for Textile Workers is meant for decasualising labour and regulating pools of substitute workers on the basis of the rates of absenteeism, labour turn-over, demands etc. In addition to this the scheme also proposes to bring together as expeditiously and economically as possible employers and employment-seekers and to place workers suitably, to help them to stick up to their work thereby promoting steady output and better quality of production. The Scheme would in addition help to eradicate bribery and corruption in the recruitment and employment of labour. Finally the scheme could undertake systematic training of workers as well.

The scheme as it exists to-day is in operation for the Cotton Textile Industry in the Cities of Bombay, Ahmedabad Sholapur and covers about 3,30,000 workers in the Cotton Textile Industry in the Bombay State. The necessity of placing the scheme on a statutory basis has been felt since long. It is, therefore, proposed to undertake suitable legislation with a view to effective enforcement of this scheme.

It is accordingly proposed to reorganise the present set up of the Sectional offices which will be placed in charge of Employment Officers, additional posts for which will have to be created and also to extend gradually the benefit of this scheme to other areas which have not so far been covered so as to bring within its scope approximately 4,60,000 additional workers in the textile industries.

Reorganisation of the Institute for Training of Labour Welfare Workers, Bombay.—In order to meet the growing requirements of trained personnel in the field of Labour Welfare, the Institute for Training of Labour Welfare Workers was started in 1947-48. The Committee, appointed in September 1953 to consider the question of reorganising the Institute, recommended that the Institute should be up-graded and the nine months' general course in Labour Welfare Work should be substituted by two years' professional course in Labour Welfare, as the trainees of the Institute are required to work as Social Workers in the fields of Labour and Industry. As the Diploma awarded by the Institute has been recognised as a requisite qualification for the purpose of making appointments of Welfare Officers in factories under the

Welfare Officers Rules framed under the Factories Act, 1948, by State Governments, the upgrading of the Institute is necessary. The revised professional course of two years in Labour Welfare providing a comprehensive and integrated curriculum of studies and field work has been already introduced with effect from 1st July 1955.

Evening Classes for Industrial Workers.—A majority of the workers enter the industry without any scientific training. This results in lack of efficiency and also affects industrial production.

It is porposed to give facilities to the existing industrial workers to improve their efficiency in their present jobs or to qualify themselves for higher jobs by arranging evening classes for them. These classes will be organised at the existing technical institutions as far as possible. Facilities will be provided at these evening classes for training of such industrial workers as are discharged as a result of the introduction of new methods and technique to enable them to acquire necessary knowledge for their eventual reabsorption in the industry or to learn alternative trade for which there are demands in the country. Training courses will also be organised to enable the industrial workers to appear for the National Trades Certificate Examination.

LABOUR WELFARE

A new experiment to associate workers and employers with labour welfare work through a suitable agency has been made by the Government of Bombay which has constituted the Bombay Labour Welfare Board, and transferred all Welfare Centres to it with effect from 1st July, 1953. The Board consists of 14 members who include representatives of employers, employees, women and independent members. The activities of the Board are conducted from the Bombay Labour Welfare Fund which consists of—

(*a*) all fines realised from the employees;

(*b*) all unpaid accumulations;

(*c*) any voluntary donations;

(*d*) any labour welfare fund of an establishment duly transferred to the Board; and

(*e*) any sum borrowed by the Board.

The Board took over the entire labour welfare organisation of Government including staff, equipment and premises, as a running concern. Thus 54 Labour Welfare Centres in the Bombay States were transferred to the control of the Board.

The Centres are classified into 'A', 'B', 'C' and 'D' types according to the facilities available at them. 'A' type centres are located in spacious, well-planned buildings, with open spaces for outdoor games and sports. Part of the grounds, are reserved for children's playgrounds. With attractive equipments like swings see-saws, sliding chutes, giant strides and ocean waves fixed thereon. There are also facilities such as gymnasia, wrestling pits and showerbaths. 'B' type centres were intended to provide similar facilities on a smaller scale, but owing to paucity of suitable accommodation it has not been possible to conduct all activities on full scale at every B type centre. 'C' type centres provide all indoor amenities and a few outdoor facilities. 'D' type centres consist of open grounds for outdoor sports, etc. only. The various Labour Welfare Centres are functioning in important industrial areas as shown below :—

Serial No.	Place	Number of Centres				
		'A' type	'B' type	'C' type	'D' type	Total
1	Bombay	3	......	13	2	18
2	Thana	......	......	1	......	1
3	Ambernath	......	......	1	......	1
4	Poona	......	1	......	......	1
5	Ahmedbad	1	......	8	......	9
6	Baroda	......	1	......	......	1
7	Surat	......	1	......	......	1
8	Nadiad	......	1	......	......	1
9	Broach	......	1	......	......	1
10	Viramgaum	......	1	......	......	1
11	Sholapur	1	......	8	......	9
12	Barsi	......	1	......	......	1
13	Jalgaon	......	1	1	......	2
14	Chalisgaon	......	......	1	......	1
15	Amalner	......	......	1	......	1
16	Dhulia	......	1	1	......	2
17	Hubli	......	1	1	......	2
18	Gadag	......	1	......	......	1
	Total	5	11	36	2	54

The activities of the Welfare Centres include :—

Recreation (*a*)—Entertainment Cinema—Dramatics—Music—Concerts—Radio Programmes—Kalapathak.

(*b*)—Games and Sports—Outdoor games—Athletics—Calisthinics—Gymnasia—Wrestling—Indoor games.

Health.—Hygiene and Community Health—Safety-First-Aid—Health Advice and Literature—Prohibition and Anti-drink propaganda—Excursions and Holiday Homes.

Community and Social Education.—Workers' Education : (*a*) Civic ; (*b*) Social ; and (*c*) General—Reading Rooms libraries and circulating library posts—Training for alternative occupations and vocational guidance—Exhibitions.

Special Activities.—A. Women: Sewing classes—Subsidiary Occupations; Handicrafts—Nutrition—Home economics—Family care, B. Children; Creche—Nursery classes—Children's libraries—Children's playgrounds—Scouts and Guides—Juvenile clubs. General Administration: Office Organisation—Accounts and Audit—Records, reports and statistics-General Organisations of Centres—Staff Training—Publicity and public relations.

Arrangements for Cinema shows regularly at Labour Welfare Centres exist at Bombay, Ahmedabad and Sholapur. The Board maintains its own projectors and other equipment along with a fairly well-balanced film library.

Exhibitions held at Welfare Centres every year provide entertainment and also have an educational value. Pictures, posters and charts depicting educational, health and prohibition features are a great attraction to workers. These exhibitions also display handicrafts by working class families.

Besides running the Labour Welfare Centres, the Board has undertaken the following activities:—

(1) Six Nursery Schools for the children between the ages of 2½ and 6 (three in Bombay, two in Sholapur and one in Ahmedabad). These Nursery Schools would be continued during the Second Five-Year Plan period and would cost about Rs. 40,000 per year including the cost of a square mid-day meal.

(2) The Board conducts two creches at Sholapur and the annual expenditure thereof works out at Rs. 15,000, i.e. a total expenditure of Rs. 75,000 during the Second Five-Year Plan period. Since the Year 1953-54, the Bombay Labour Welfare Board has been trying out successfully remunerative employment schemes under which unemployed and under-employed workers and their dependents are given some subsidiary occcupations at Centres by which they are able to earn a supplementary income from time to time. This has been so far confined to women and girls but the Board has now decided that it should be extended to cover disabled workers also. A sub-Committee was ap ointed by the Board to work out a comprehensive long-term scheme for Bombay, Ahmedabad, Sholapur and Karnatak and during 1955-56 a provision of Rs. 60,000 was made in the budget. An expenditure of Rs. 75,000 per year is envisaged during 1956-61 under this scheme.

During the Second Five-Year Plan period, it is proposed to open 13 additional 'C' type centres at Belgaum, Billimora, Cambay, Chembur, Kadi, Kalol, Kirloskarwadi, Kolhapur, Navsari, Ogalewadi, Pachora, Petlad and Sangli.

The Five 'A' type centres located in Bombay, Ahmedabad and Sholapur have open spaces attached to them for conducting various outdoor activities such as football, volley-ball, hu-tu-tu and other out-door games. These grounds are not enclosed and consequently it is not possible to give to these places the necessary attention so as to make them really useful for organised recreational and cultural activities. It is, therefore, felt that these grounds should be properly enclosed with brick walls with seating arrangements in tiers built on the walls. In addition, suitable stages for open air dramatic and other entertainments need to be constructed on the grounds.

WELFARE OF BACKWARD CLASSES

The Backward Classes with a population of 1·08 crores constitute 30·18 per cent. of the total population of the Bombay State. They are broadly divided under the following 3 categories :—

(a) *The Scheduled Castes or Harijans.*—This category consists of 32 communities with a population of 30,03,024 in Bombay State according to the 1951 census. About 26 per cent. of the Scheduled Castes are cultivating owners while about 19 per cent. are agricultural labourers. Almost half the members of the Scheduled Castes belong to the non-agricultural classes. The traditional occupations of the Scheduled Castes are in the main non-agricultural *e.g.*, tanning, shoe-making and scavenging. Productive occupations other than cultivation account for about 21 per cent. of the Scheduled Castes and other services and miscellaneous occupations, for about 19·76 per cent. The proportion of the Scheduled Castes engaged in commerce is very low.

(b) *The Scheduled Tribes or Adiwasis.*—This category consists of 24 communities with a population of 33·59 lakhs in Bombay State according to the 1951 census. They are cut off from the main stream of life due to want of communications in the hilly areas which they inhabit. The vast majority of the Scheduled Tribes lives in the rural areas. Only 6·15 per cent. of them live in urban areas like Ahmedabad, Godhra, etc., where they form a tiny fraction of the population. The Scheduled Tribes are primarily agriculturists. 83·71 per cent. of them belong to the agricultural classes. Of these nearly half depend for livelihood on cultivation of their land.

(c) *The other Backward Classes.*—There are 160 communities included in the list of other Backward Classes and their population in this State according to the 1951 census is 44·89 lakhs. These communities are approximately at the same stage of social and educational advancement of the communities included in the list of Scheduled Castes and Scheduled Tribes and require as much special help from the State as possible. Nomadic and semi-nomadic tribes, the erst-while criminal tribes communities following the heriditary occupation of begging, communities descended from Devdasis, etc., which are largely backward are included in this list. About 88·36 per cent. of the other Backward Classes live in rural areas. Roughly 30·16 per cent. of these classes belong to the non-agricultural classes.

The disabilities to which the Backward Classes in Bombay State are subjected are still manifold. In order to remove the various disabilities from which the Backward Classes have been suffering and to bring them to the level of the rest of the population within the shortest possible time, special facilities have been provided for them. In 1942 an *Ad hoc* committee was constituted to advise Government on the measures to be undertaken for their uplift. On the recommendations of this Committee, a Special Development Fund of Rs. 25 lakhs was set up and schemes mainly designed to secure educational progress among them was taken up in hand. This Fund was augmented by the addition of Rs. 1 crore in 1947 which enabled the Government to intensify the programme for amelioration of Backward Classes. With the merger of the several states in Bombay State, it became necessary to find larger funds for the welfare of Backward Classes, since the merged States especially in Gujarat contained a substantial population of Scheduled Tribes. Accordingly in the First Five-Year Plan of Bombay State, a provision of Rs. 2,13·57 lakhs was made for special schemes for the amelioration of the Backward Classes. The schemes covered a wide field including education, agricultural improvements, cottage industries, etc. But the main emphasis was on educational uplift. Under this Plan free education is provided to Backward Classes at all stages, primary, secondary and collegiate. In addition over 850 sets of scholarships have been sanctioned for Backward Class Students in Primary, Middle and High Schools. All eligible Backward Class scholars in Colleges are given scholarships. Two additional hostels have been opened for Backward Classes at Ahmedabad and Hubli and voluntary agencies are given substantial grants for providing hostel facilities to Backward Class scholars. Special concessions have been sanctioned for the Co-operative Societies among the Backward Classes. Particular mention may be made of the Co-operative Housing Societies and Forest Labourers Co-operative Societies which receive substantial assistance from Government. The local Authorities have been encouraged to construct quarters for their Harijan employees and undertake slum-clearance schemes. Under this Plan all communities included in the list of Backward Classes were treated on an equal footing for the purposes of the various concessions sanctioned by Government.

In addition to the above measures, Government has also undertaken special measures for the welfare of the Scheduled Tribes, and *Vimukta Jatis* (ex-Criminal Tribes) and for the eradication of untouchability with the liberal grants sanctioned by the Government of India. These measures envisage speedy educational and economic uplift of the Scheduled Tribes and *Vimukta Jatis* and eradication of untouchability.

Although some work has been done for the welfare of the Backward Classes in the First Five-Year Plan, a considerable leeway has yet to be made. The percentage of literacy among Backward Classes is 10·67 per cent. as against 24 per cent. in the general population. Their economic condition is still far from satisfactory. It will, therefore, be necessary to intensify the programme for amelioration of this section of the population. The two Government hostels at Poona and Ahmedabad are proposed to be extended and a Government hostel for girls is proposed to be started. In addition, voluntary agencies will be encouraged to start hostels. The Backward Classes are being given Government waste lands wherever possible. It is now proposed to give them financial assistance on liberal terms for reclamation of these lands which are being given to them for cultivation. A provision of Rs. 28 lakhs is proposed to be made for the purpose. To improve their housing conditions, assistance in the form of subsidies will be given to 162 Co-operative Housing Societies of Backward Classes for which a provision of Rs. 24,34,000 is being made in the Second Plan. Loans and subsidies amounting to Rs. 2 lakhs are proposed to be given on personal security to the Backward Class artisans trained in various industrial schools. In addition to the above schemes, which are meant for all Backward Classes special schemes for the benefit of the Scheduled Tribes and *Vimukta Jatis,* who, among the Backward Classes are relatively Backward, are proposed to be undertaken. It is proposed to open 23 additional Ashram Schools for the Scheduled Tribes and 3 additional Ashram Schools for the *Vimukta Jatis* at a cost of Rs. 26·73 lakhs and to develop some of the existing Ashram Schools at an additional cost of Rs. 23·42 lakhs. The importance of Ashram Schools cannot be over-emphasised. In fact, the Ashram School is the only long-term solution not only to the educational problems of these communities, but also to their general welfare. Provision for scholarships and books and slates for *Vimukta Jatis* pupils is being increased. Short term courses designed to enable the teachers of Scheduled Areas to handle efficiently the problem of the Scheduled Tribes are proposed to be organised at a cost of Rs. 1·25 lakhs. The poor

Scheduled Tribe agriculturists whose financial conditions are very unsatisfactory will be given a special assistance of Rs. 1·5 lakhs for their uplift. Similar assistance to the extent of Rs. 1·75 lakhs will be given to the *Vimukta Jatis* cultivators. Considering the meagre medical facilities in the Scheduled Areas, it is proposed to start 15 mobile dispensaries in these areas at an additional cost of Rs. 10·64 lakhs. Five model colonies of the Scheduled Tribes are proposed to be organised at a cost of Rs. 5 lakhs.

In order to encourage Scheduled Tribes to form more forest labourers' co-operative societies, it is proposed to give financial assistance to 125 Societies at the rate of 25 societies per year and also to aid some of the existing societies. A provision of Rs. 7·5 lakhs has been made for the purpose. It is also proposed to provide an amount of Rs. 23·5 lakhs for the development of Scheduled Areas and under-developed areas. The amount is meant for special measures like irrigation wells and bunding for Scheduled Tribes agriculturists and for village approach roads.

For the speedy eradication of untouchability, it is proposed to intensify the present drive and a provision of Rs. 29·59 lakhs has been included in the Second Plan for undertaking the necessary measures. Special mention must be made of the nomadic and semi-nomadic tribes who, because of their extreme ignorance, poverty and unsettled conditions have not so far been able to avail themselves of the beneficient measures undertaken by Government for the Backward Classes. For their uplift Government has set apart a sum of Rs. 85 lakhs to be spent mainly on their economic welfare and rehabilitation.

In order to extend the benefits of ameliorative measures to merged States territories, it is proposed to encourage voluntary agencies to extend their activities to such areas by appointment of propagandists and by starting hostels. An amount of Rs. 1 lakh is earmarked for this purpose.

The total cost of the proposals specially devised for the welfare of the Backward Classes is Rs. 3·15 crores. In addition there are several schemes included under other Heads of Development like Agriculture, Cottage Industries, Education and Health benefits from which will be derived by Backward Classes, specially by the population residing in Scheduled Areas. Some of these schemes are mentioned below :—

Serial No.	Name of Scheme	Provision in the Plan (Rs. in lakhs)
	AGRICULTURE	
1	Levelling and Terracing of hill slopes	6
2	Survey of merged areas	5
3	Land improvement, anti-erosion and water conservation works ...	4
4	Afforestation of arid and blank areas	53·52
5	Restarting of Waghai Saw Mill	2·59
6	Planting of Agave Hedges	6·40
7	Communications	12·50

Serial No.	Name of Scheme	Provision in the Plan (Rs. in lakhs)
	CO-OPERATION	
8	Rehabilitation of nomadic cattle breeders	23·64
	VILLAGE AND SMALL INDUSTRIES	
9	Organisation of post-training production centres in Backward areas	2·64
10	Starting of production centres in chrome uppers and picking bands ...	5·07
11	Organisation of retanning and finishing centres in Backward areas	1·66
12	Starting production centre in pit-tanned leather	2·95
13	Development of tanning and leather working industries	20·23
	HOUSING	
14	Loans to Backward Class Co-operative Housing Societies	35·56
	VILLAGE PANCHAYATS	
15	Financial assistance to Village Panchayats in Adiwasi and Backward areas	16·00
	Total ...	197·76

In addition to the measures described above certain Centrally sponsored schemes are proposed to be undertaken for Backward Classes during the Second Plan period. The Government of India have set apart for this purpose a provision of Rs. 32 crores in the Central Plan of which Rs. 24 crores are meant for Scheduled Tribes and Scheduled areas and the rest for other Backward Communities. The following measures estimated to cost Rs. 4·20 crores are proposed to be undertaken in this State under the Centrally sponsored programme subject to the concurrence of the Government of India :—

	Proposed Provision (Rs. in lakhs)
A. Schemes for the Welfare of Scheduled Tribes and for Scheduled areas—	
(*i*) Intensive development of 4 blocks in Akrani Mahal in West Khandesh District, Santrampur Taluka in Panch Mahal District, Mal-Talasari block in Thana District and Khedbrahma Taluka in Sabarkantha District.	200
(*ii*) Village Approach Roads in Scheduled areas ...	50
(*iii*) Housing of Scheduled Tribes	30
(*iv*) Provision of drinking water facilities in Scheduled Areas.	30
(*v*) Provision of medical facilities	10
(*vi*) Training Schemes	5
(*vii*) Other Schemes	15
Total A ...	340

	Proposed Provision (Rs. in lakhs.)
B. Schemes for other Backward Communities—	
Various schemes are proposed of which the main schemes relate to housing, drinking water supply and encouragement to cottage industries.	**80**
Total B ...	**80**
Grand Total A & B ...	**420**

SOCIAL WELFARE

Measures for the welfare of Backward Classes, Scheduled Tribes and Scheduled Areas have been discussed separately. In this Part the schemes relating to correctional administration, juvenile delinquence, welfare of women, children and the physically handicapped are dealt with. The Government of Bombay has taken the lead in waging a war against ingorance, superstition, religious bigotry, social injustice and racial indiscrimination both through statutory measures and through liberal grants to voluntary agencies working in the field of social welfare. The Prevention of Prostitution Act, 1923, the Bombay Devadasi Protection Act, 1950, the Prevention of Hindu Bigamous Marriages Act, 1946, the Bombay Hindu Divorce Act, 1947, the Bombay Habitual Offenders Restriction Act, 1947, the Bombay Borstal Schools Act, 1929, the Bombay Children Act, 1948, and the Bombay Beggars Act, 1947, constitute some of the important landmarks in this direction. For the custody and protection of socially handicapped children Remand Homes have been established. There are also serveral certified schools in this State for boys and girls. The object of the Children Act is both preventive and remedial. It provides for protection, treatment, education and rehabilitation of destitute delinquents and victimised and uncontrollable children below the age of 16 years. With the establishment of separate Juvenile Courts to deal with cases of such children and provision of institutions for treatment, probation and after care services and for their guidance it has been possible to make considerable headway. By the end of March 1955, there were in this State 31 Juvenile Courts, 50 Remand Homes, 28 Certified Schools, 105 Fit Person Institutions, 20 State and District Associations and 4 After-Care Hostels. Beggar homes have been provided with facilities for training the beggars in suitable vocations to enable them to earn their livelihood. In addition substantial grants are given to voluntary organisations for rehabilitation of socially handicapped and children and for relief of the blind, deaf and mutes. In the Second Five-Year Plan a provision of nearly Rs. 30 lakhs has been made for expansion of the Juvenile Department and for opening additional certified schools, Remand Homes, after-care hostel workshops and classification centres. In addition a provision of about Rs. 10 lakhs has been included in the Plan for establishment of sheltered workshops and for general measures for the improvement of education of the physically handicapped and services for welfare of women above the age of 21. Provision is also made for expansion of the work under the Bombay Probation of Offenders Act, an After-Care hostel for Beggars and for research work in the problems of juvenile delinquency.

A provision of Rs. 24·80 lakhs is also made in the Plan on account of the share of cost to the State Government for a scheme of social and moral hygiene and after-care services sponsored by the Central Government for providing State Homes, district Shelter Homes and Reception Centres for rescued women and persons released from correctional, non-correctional and care institutions.

In June 1954, the Government of Bombay constituted the State Social Welfare Advisory Board which co-ordinates the Welfare activities of the Central Social Welfare Advisory Board in this State. The Central Social Welfare Board has launched a programme of 27 Welfare Extension Projects in consultation with the State Social Welfare Advisory Board to cover each District in this State. The Welfare Extension Project Scheme is intended to extend Welfare Services for women and children in the rural areas. These Projects are being implemented by non-official committees known as Project Implementing Committees, consisting of representatives of voluntary welfare institutions working in or around the Project areas. Each project consists of about 20 to 24 villages covering a population of about 20,000 people and may have from five to seven Centres each catering to 3 or 4 villages. The cost of a project consisting of five Welfare Centres is estimated to be about Rs. 21,000 per annum 50 per cent. of which will be the share of the Central Social Welfare Board, the remaining 50 per cent. being borne by the beneficiaries and the State Government.

The policy regarding State Assistance adopted by Government so far is that Welfare Extension Projects located in the Community Development Programme and National Extension Service areas would get assistance from the funds allotted for these Schemes and those located outside those areas would get assistance from the Local Development grants. Where, however, schemes of welfare do not fit in the Local Development Works Programme or are located outside the Community Projects and National Extension Service areas, it would be necessary for the State Government to make separate provision for meeting its share.

During the Second Five-Year Plan period the programme of Welfare Extension Projects is proposed to be expanded by starting more projects in the State on an intensified scale. On the assumption that 27 more projects will be undertaken during each year of the Second Five-Year Plan period, the total cost of the programme is estimated to be 36,45,000 at Rs. 21,000 per annum per new project of five centres each and Rs. 3,000 per annum for continuance of the Centres started during the Second Five-Year Plan period. To this must be addded the grants on account of the maintenance of Centres started before the Second Five-Year Plan.

As pointed out above the total cost of the scheme will have to be shared between the Central Social Welfare Board, the State Government and the Project Implementing Committees. The State Government has made a specific provsion of Rs. 15 lakhs for the purpose. In addition to this, for projects started in the Community Development Projects and National Extension Service areas necessary assistance would be available from C.D.P. and N.E.S. funds if the requisite conditions for such assistance are satisfied. It is estimated that this assistance may also be of the order of about Rs. 15 lakhs. This amount will be found from the C. D. P. and N. E. S. funds. Similarly assistance for schemes which qualify for grants from the Local Development Works provision would also become available. The total outlay on account of the social welfare activities of the State Social Welfare Advisory Board including Central assistance and local contribution is thus expected to be of the order of Rs. 1 crore or so.

The total povision in the State Plan for Social Welfare other than welfare of the Backward Classes, is of the order of about Rs. 61 lakhs.

CHAPTER XII

DEVELOPMENT SCHEMES OF LOCAL BODIES AND OTHER MISCELLANEOUS ACTIVITIES

SCHEMES OF LOCAL BODIES

Proposals for inclusion in the Second Five-Year Plan were invited directly from the three Municipal Corporations and the Collectors and Chairmen of the District Development Boards were requested to include in the District Plans proposals from the Municipalities in the respective districts.

The bulk of the programme framed by the Local Bodies relates to slum clearance, water supply and drainage and construction of quarters for Harijan employees of the Local Bodies. Other schemes proposed by the Local Bodies include hospitals and dispensaries, school buildings, town planning schemes, markets, recreational activities and administrative buildings.

At present, Government has been providing assistance to the Corporations and Municipalities to the extent of about Rs. 2 crores annually by way of grants for development purposes in addition to loans to the extent of Rs. 1·32 crores. In the Second Plan period a provison of Rs. 8·5 crores has been made by way of grants on account of committed expenditure of the Municipalities. Most of these grants are on account of primary schools and public health purposes. Apart from the grants for primary education the following schemes included in the Second Five-Year Plan of the State are intended to provide benefit directly to various Local Bodies :—

	Cost for five years (Rs. in lakhs)
(*i*) Village Approach Roads	400
(*ii*) Piped Water supply and Drainage schemes—	
(*a*) Completion of works in progress	264
(*b*) New works	82
(*iii*) Subsidised water supply schemes	118
(*iv*) Tansa-Vaitarna Water Supply Scheme	250
(*v*) Khadakwasla Water Supply Scheme	150
(*vi*) Subsidies for construction of modern sanitary conveniences	4
(*vii*) Loans for construction of slaughter houses	5
(*viii*) Grants for preparation of Development Plans for Town Planning.	8·40
(*ix*) Grants-in-aid to local bodies for Public Health Purposes.	24
Total	1,305·40

In addition a lump provision of nearly Rs. 6·82 crores has been included in the Second Five-Year Plan of the State Government on account of grant of assistance to the various local bodies to enable them to implement their development schemes. Of this an amount of Rs. 2·25 crores is proposed for assistance to local bodies in the form of subsidies and about Rs. 4·57 crores is provided in the form of loans.

MISCELLANEOUS SCHEMES PROPOSED BY THE DISTRICT DEVELOPMENT BOARDS

Most of the Schemes proposed by the various District Development Boards would be covered by the general schemes included in the Second Plan. There are however some schemes of a miscellaneous nature which may have to be considered individually as they may not fit into the specific programmes of development. As these schemes are of various categories a lump provision of Rs. 1 crore has been included in the State Plan to cover such schemes.

PUBLICITY, PROPAGANDA AND TOURISM

The State Government has been conducting publicity of the Five-Year Plan and the various programmes of development undertaken by the State through films, pamphlets, posters, pictures, exhibitions, mobile publicity vans, etc. During the Second Plan period this work will be intensified. The rural broadcasting scheme will be expanded and 27 information centres will be started one for each district for proper dissemination of information to the public. An extensive programme of feature and film publicity, printed and pictorial publicity, and publicity through recreational activities will also be launched. A total provision of Rs. 37·5 lakhs is included in the Plan for this purpose.

TOURISM

There are several natural beauty spots and other places of historical importance in Bombay State which attract tourists both from abroad and from within the country. The hill stations of Mahableshwar, Matheran and Mt. Abu, the monumental carvings at Karla and Elephanta Caves, the historical buildings in Bijapur, the natural hot springs at Unai and Vajreshwari, have attracted a large number of tourists. In the First Five-Year Plan a National Park near Kanheri caves in Greater Bombay was developed. A commodious pavilion with quarters for staff, tourists cabins and a swiming pool have been constructed. It is necessary to provide better facilities of transport and residential accommodation at other places during the Second Plan period to encourage tourism. The Government of India in the Ministry of Transport are drawing up a comprehensive programme for development of tourism in the country. In the Central Plan a provision of Rs. 12·90 lakhs has been included for carrying out improvements and construction of new rest-houses at the following places in Bombay State :—

(*i*) Improvement and expansion of the Circuit House at Ahmedabad.

(*ii*) Improvement to the Jetty and construction of a pavilion with a retiring and a cloak room at Elephanta.

(*iii*) Expansion and air-conditioning of Travellers Bungalow at Bijapur.

(*iv*) Construction of a new Rest House at Aiholi for foreign tourists.

(*v*) Expansion and improvement of the Rest House at Badami.

(*vi*) Construction of a new Rest House at Hospet and improvement of the existing Rest House at Hampi.

(*vii*) Improvement of the Travellers' Bungalow at Karwar.

The State Plan also includes several schemes which will help encourage tourists traffic. Provision has been made in the Plan for establishment of national parks at Elephanta Island off Bombay and at Sinhagad Fort near Poona. The landscape around the hot springs at Unai in Surat District and at Vajreshwari in Thana District will be developed. Under the programme of administrative buildings Rest Houses for low income groups will be constructed at Ahmedabad, Aiholi, Badami, Dharwar, Mt. Abu and Nasik and existing rest houses at Bijapur will be reconditioned. A holiday camp will also be established at Matheren. Similarly the Bombay Municipal Corporation has been requested to construct Rest Houses at Tansa Lake and at Vaitarna. The State Transport Corporation has been requested to provide adequate passenger transport services at Badami, Aiholi and Bijapur. A provision of Rs. 5 lakhs has also been made for expansion of the wild life and game sanctuary at Dandeli and for establishment of 9 small sanctuaries.

CHAPTER XIII

REHABILITATION OF DISPLACED PERSONS

On the partition of the country in August 1947, about 4 lakhs of displaced persons migrated from West Pakistan to this State. A number of displaced persons who possessed initiative and enterprise were able to stand on their legs from the very beginning. The problem of Relief and Rehabilitation of the balance numbering about 2 lakhs had to be faced by the State Government. The Government of India assumed direct responsibility for the relief and rehabilitation of these displaced persons for a brief period of about 4 months in 1948. In June 1948, the State Governments were called upon to shoulder the responsibilities for the relief and rehabilitation of these displaced persons. In the initial stages, the main task was to provide shelter and other essential articles of daily needs such as food, clothing, etc., to such displaced persons. The displaced persons were accommodated in military barracks which were either vacant or surplus with the Defence authorities. The influx of the displaced persons continued unabated till March 1949 and it was only then that the State Government could direct its attention to the more difficult problem of rehabilitation of the large masses of people who had been uprooted from their ancestral homes. As a first step, Government had to tackle the problem of termination of gratuitous relief initially given in the shape of free rations, clothing, etc., partly with a view to curtailing the heavy expenditure involved therein and partly as an incentive to the displaced persons for making efforts to stand on their own legs. It was, therefore, decided to launch upon a policy of gradual stoppage of relief and liquidation of some of the relief camps by dispersal of the displaced persons to certain selected towns in the interior of the State where opportunities for gainful employment were likely to be available. A certain category of displaced persons, consisting of unattached women, children, the aged and the infirm numbering about 6,000 are still being paid cash doles. The problem of their rehabilitation presents special difficulties and they are considered more or less as a semi-permanent liability. Separate homes for this category ofdisplaced persons have been set up at Ulhasnagar and Sardarnagar, Valivada and Dhulia and this class of displaced persons is being encouraged to rehabilitate themselves by starting for them work production centres in the Homes. Reorganisation of the home in Ulhasnagar is also under consideration of Government.

With the general stoppage of gratuitous relief, the problem of permanent rehabilitation of displaced person sin general had to be tackled. The following were the several measures adopt by Government in this respect :—

(1) Provision of permanent housing and setting up of townships and colonies for displaced persons.

(2) Provision of Vocational and Technical Training ;

(3) Starting of work-cum-production centres for providing employment to passed out trainees and skilled workers ;

(4) Schemes for agricultural colonisation ;

(5) Grant of financial assistance by way of loans for setting up of business and for starting small scale industries ;

(6) Provision of trade facilities such as supply of articles in short supply and motive power for industries ;

(7) Assistance to displaced students for prosecuting their studies ;

(8) Allotment of evacuee property ;

(9) Loans for starting of industries in Displaced Persons' townships and colonies.

The more important schemes specifically sanctioned, e.g., Housing Schemes, Vocational and Technical Training Schemes and Work Production Centres, Loans to displaced persons which had been implemented even before the First Five-Year Plan commenced, have made considerable progress, specially in the First Plan period but much still remains to be done. With a view to indicating the progress made so far and the work still remaining to be done in the Second Plan period, the position under each scheme is briefly described below :—

Housing Schemes.—The provision of permanent housing is perhaps the most important phase of the rehabilitation problem. Without suitable permanent residential accommodation it would not obviously be possible to instil a sense of security among the displaced persons. This problem therefore naturally received the primary attention of the Government of India and the State Government and a number of schemes for construction of tenements, shops, development, etc., have been sanctioned so far and have either been already executed or are in the process of execution. While it is not necessary, to give here a detailed list of such schemes, the manner in which the problem is being dealt with can be stated broadly as follows :—

(*i*) Construction of 2 new townships (Ulhasnagar and Sardarnagar).

(*ii*) Setting up of small colonies at Nasik, Pimpri, Mulund, Chembur and Valivade.

(*iii*) Dispersal of displaced persons to smaller towns where small settlements have been built as adjuncts to existing townships ;

(*iv*) Promotion of private enterprises in house-building by grant of loans to individuals and co-operative housing societies of displaced persons and by release of building materials at controlled rates.

The target in terms of tenements and shops to be constructed in displaced persons' townships and colonies is 37,142 tenements and 1,794 shops, out of which about 28,700 tenements and 1,219 shops have been constructed till the end of 1954-55. Construction of a further 5,802 tenements and 495 shops was in progress during 1955-56, the remaining being taken up for construction in 1956-57. In addition to schemes for construction of tenements and shops in the townships and colonies, major schemes of development such as internal water supply system in Ulhasnagar Township, sullage drains, construction of roads, street lighting, etc. are also proposed to be undertaken. A beginning has already been made in this respect but it is expected that most of the development schemes would be taken up and completed in the Second Plan period. As regards loans to co-operative housing societies of displaced persons, loans amounting to about Rs. 46 lakhs have been sanctioned so far, out of which payments aggregating Rs. 42.85 lakhs have already been made. Provision has also to be made for grant of loans to new co-operative housing societies of displaced persons, if any, in the Second Five-Year Plan.

The entire expenditure on the housing schemes for displaced persons is being met by obtaining loans from the Government of India who are committed to the completion of the programme. It is expected that the loans to the extent of the balance still required to complete the housing schemes will be provided by the Government of India in the Second Five-Year Plan period.

Vocational and Technical Training Schemes.—Two vocational and technical training centres have been established in the displaced persons' townships at Kalyan and Ahmedabad which have a total sanctioned strength of 736 trainees. About 7,000 displaced persons were trained at these centres till the end of 1954-55 and 736 trainees are under training. If the centres are continued for the entire period of the Second Five-Year Plan nearly 4,000 more displaced persons will receive training in the various technical and vocational trades taught at these centres. In view of the importance of imparting technical and vocational training it is expected that the centres which are being financed by the Government of India will be continued by that Government for the entire period of the Second Five-Year Plan.

Work-cum-Production Centres.—In order to create opportunities for employment of skilled workers and those who pass out from the Vocational Training Centres four production centres were originally started. The Scheme was completely reorganised in 1953 and there are now three centres, one each in the Ulhasnagar Township, Pimpri and Valivade Colonies under the overall control of the Administrative Officer, Vocational Training Centre, Ulhasnagar Township. The centres provide gainful employment in industries such as handloom, weaving and textile printing and tailoring, hosiery, leather, carpentry, etc. to 345 skilled and unskilled workers and it is considered essential to continue them in the Second Five-Year Plan period in the larger context of relieving unemployment.

Agricultural Colonisation.—Agricultural colonisation schemes have been sanctioned for settlement of about 1,500 displaced persons' agriculturist families at Radhanpur in Mehsana District, Deesa in Banaskantha District, Waghodia in Baroda District and Sawantwadi in Ratnagiri District. The main features of the agricultural colonisation schemes are :—

1. Each family is given about 10 to 14 acres of land on new and impartible tenures.

2. No assessment is charged for first 3 to 5 years.

3. Each family is given a tagai loan of Rs. 1,162 for the purpose of bullocks, seeds, manure, agricultural implements, repairs to houses, construction of huts, etc.

4. The displaced persons are organised in co-operative societies.

1416 families have so far settled in these colonies.

Urban Loans.—The scheme for grant of loans to displaced persons for engaging in business or trades or for arts or crafts and small scale industries was initiated at the instance of the Government of India in 1948. The maximum loan admissible under the scheme to individuals and co-operative societies is Rs. 5,000 and Rs. 25,000 respectively. Insterest is charged at the rate prescribed by the Government of India. No recovery of principal is made during the first three years and no interest is charged for the first year from the date of payment of the loan but full recovery of both principal and interest is to be effected within a maximum period of six years. From the financial year 1952-53, the scheme was confined to displaced persons staying in certain townships and colonies, e.g., Ulhasnagar, Sardarnagar, Valivade and Pimpri and the trainees passing out from the Vocational Training Centres and Rehabilitation Production Centres, etc. The scheme was however, slightly liberalised later and was made applicable to displaced persons having verified claims all over the State. In other words, the scheme was integrated with the scheme of payment of claims to displaced persons. Non-claimant displaced persons, are also eligible for such loans, preference being given to certain categories. Loans aggregating to Rs. 1·42 crores have been sanctioned to about 23,000 displaced persons so far. In order to meet the demands from urgent and deserving cases of non-claimant displaced persons applying for loans a provision of about Rs. 10 lakhs would be required during the Second Plan period.

Financial Assistance to Displaced Students.—Displaced students in primary and secondary schools and colleges (Technical and Non-techinical) are granted financial assistance in the form of freeship, stipends and loans to prosecute their studies. An expenditure of about Rs. 55 lakhs has been incurred till the end of 1954-55 and a further expenditure of about Rs. 10 lakhs is expected to have been incurred during 1955-56. As the scheme has proved very beneficial to a large number of displaced students, it is expected that the Government of India which provides the financial assistance for the scheme will continue the scheme under the Second Five-Year Plan.

Assistance of starting of industries in Displaced Persons' Townships and Colonies.—The Government of India has evolved a scheme for starting of industries in townships and colonies to relieve unemployment. The scheme is being implemented by the State Governments in consultation with the Government of India. Under the scheme, industrialists wishing to start industries are to be given financial assistance by way of loans and provision of lands and buildings on hire-purchase basis. Other facilities such as supply of electricity at concessional rates, water supply, etc. will also be provided. The full details of the scheme are however still under the consideration of the Government of India. Pending finalisation of these details, applications already received have been scrutinised and forwarded to the Government of India with the recommendations of the State Government. Some other applications are still under consideration. In view of the importance attached to the problem of relieving unemployment in displaced persons' townships and colonies, it is expected that the Government of India will continue the scheme for the entire period of the Second Five-Year Plan. A provision of Rs. 50 lakhs would then be required for grant of loans to industrialists under the scheme during the Second Plan period.

The extent and scope of each of the schemes and the provisions required to be made therefor in the Second Five-Year Plan period will depend mainly on the progress made till the end of 1955-56 and the policy of the Government of India, but it has now become clear that in respect of some of the schemes e.g. housing schemes, loans to industrialists for relieving unemployment, etc. provision will have to be made in the Second Plan. It is estimated that a provision of about Rs. 2·18 crores will be required during the Second Plan period for the various schemes for rehabilitation of displaced persons. As the entire expenditure will be borne by the Centre the necessary provision will be shown in the Central Plan.

reckoned for the first year from the date of payment of the loan but full recovery of both principal and interest is to be effected within a maximum period of six years. From the financial year 1952-53, the scheme was confined to displaced persons living in certain townships and colonies e.g. Ulhasnagar, Sardarnagar, Valivade and Pimpri and the trainees passing out from the Vocational Training Centres and Rehabilitation Production Centres, etc. The scheme was however, slightly liberalised later and was made applicable to displaced persons having verified claims all over the State. Hereafter, the loans are integrated with the scheme of payment of claims to displaced persons. Non-claimant displaced persons are also eligible for such loans, preference being given to certain categories. [illegible] 1122 persons have been [illegible] loans of Rs. [illegible] per person. In order to meet the demands from urban and semi-urban non-claimant displaced persons applying for loans a provision of about Rs. 10 lakhs would be required during the Second Plan period.

Financial Assistance to Displaced Students.—Displaced students in primary and secondary schools and colleges (Technical and Non-technical) are granted financial assistance in the form of freeships, stipends and grants to prosecute their studies. An expenditure of about Rs. 36 lakhs has been incurred till the end of 1954-55 and a further expenditure of about Rs. 10 lakhs is expected to have been incurred during 1955-56. As the scheme has helped very considerably a large number of displaced students, it is expected that the Government of India which provides the financial assistance for the scheme will continue the scheme under the Second Five-Year Plan.

Assistance to Industries for Employment of Displaced Persons in Townships and Colonies.—The Government of India has evolved a scheme for starting of industries in townships and colonies to relieve unemployment. The scheme is being implemented by the State Government in consultation with the Government of India. Under the scheme, industrialists wishing to start industries are to be given financial assistance by way of loans and provision of lands and buildings on hire-purchase basis. Other facilities such as supply of electricity at concessional rates, water supply, etc. will also be provided. The full details of the scheme are however, still under the consideration of the Government of India. Pending finalisation of these details, applications already received have been scrutinised and forwarded to the Government of India with the recommendations of the State Government. Some other applications are still under consideration. In view of the importance attached to the problem of relieving unemployment in displaced persons' townships and colonies, it is expected that the Government of India will continue the scheme for the entire period of the Second Five-Year Plan. A provision of Rs. 50 lakhs would then be required for grant of loans to industrialists under the scheme during the Second Plan period.

The extent and scope of each of the schemes and the provisions required to be made therefor in the Second Five-Year Plan period will depend mainly on the progress made till the end of 1955-56 and the policy of the Government of India, but it has now become clear that in respect of some of the schemes e.g. training schemes, loans to industrialists for relieving unemployment, etc. provisions will have to be made in the Second Plan. It is estimated that a provision of about Rs. 2·18 crores will be required during the Second Plan period for the various schemes for rehabilitation of displaced persons. As the entire expenditure will be borne by the Centre, the necessary provision will be shown in the Central Plan.

ANNEXURE

Second Five Year Plan : A detailed break-up

ABSTRACT

Second Five Year Plan—Bombay State (1956-61)

(Rs. in crores)

Serial No.	Head of Development	Five Year Cost (1956–61)				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	Agriculture and Community Development ..	35·75	11·24	14·13	61·12	12·53	1·09	20.85	34·47	22·77	3·81	0·07	26·65
2	Irrigation and Power	0·10	100·85	8·95	109·90	..	..	105·32	105·32	0·10	..	4·48	4·58
3	Industry and Mining	3·00	2·19	3·77	8·96	1·29	0·28	3·26	4·83	1·71	1·66	0·76	4·13
4	Transport and Communications	0·67	20·71	..	21·38	..	..	0·16	0·16	0·67	20·55	..	21·22
5	Education	7·85	1·19	2·70	11·74	2·16	0·02	..	2·18	5·69	1·17	2·70	9·56
6	Health	9·84	8·10	5·70	23·64	2·12	..	4·90	7·02	7·72	8·10	0·80	16·62
7	Housing	0·24	5·16	10·37	15·77	0·11	3·33	7·04	10·48	0·13	5·16	..	5·29
8	Other Social Services	4·91	0·23	0·19	5·33	1·76	0·01	..	1·77	3·15	0·02	0·19	3·56
9	Scientific and Industrial Research; Languages, Literature, Arts and Culture; All other Activities.	3·84	..	4·57	8·41	0·17	..	..	0·17	3·67	..	4·57	8·24
	Total ..	66·20	149.67	50.38	266·25	20·14	4·73	141·53	166·40	45·67	40·67	13·57	99·85

Foot Note.—The provision shown in the State Plan is exclusive of the following Heads for which provision is made in the Central Part of the Plan.

Head.	Approximate Provision for the Bombay State. Rs.	
(*i*) Rehabilitation Schemes	2·18	Crores
(*ii*) National High Ways, Express Highways, Central Road Fund, Works and Centrally aided Road Works in Scheduled areas which will be shown in the Central part of the Second Five Year Plan.	14	Crores.
(*iii*) Railways' contribution for Investment in Nationalisation of passenger Transport	1·95	Crores.
(*iv*) Local Development Works Programme, and	4·00	Crores.
(*v*) Welfare Extension Projects	25	Lacs.
(*vi*) Training schemes of the Ministry of Labour	53·97	Lakhs.
(*vii*) Social and Moral Hygiene and After care Services	24·80	Lakhs.

In addition an amount of Rs. 4 crores is to be made available by the Reserve Bank of India towards the implementation of the Rural Credit Report Schemes.

HEAD OF DEVELOPMENT: *Agriculture and Community Development*

(Rupees in thousands)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Agricultural Production												
1	Additional Staff in the Department of Agriculture.	13,00	..	..	13,00	..	..	..	..	13,00	..	..	13,00
2	Training of staff of the Department of Agriculture.	1,10	..	..	1,10	..	..	..	..	1,10	..	..	1,10
3	Expansion of Training in Extension Work	12,50	5,28	..	17,78	6,64	4,25	..	10,89	5,86	1,03	..	6,89
4	Expansion of Agricultural Schools ..	26,25	13,60	..	39,85	7,00	..	..	7,00	21,45	11,40	..	32,85
5	Buildings for the College of Agriculture, Poona.	..	10,00	..	10,00	..	..	..	..	..	10,00	..	10,00
6	General Research Scheme	56,14	2,95	..	59,09	28,07	..	..	28,07	28,07	2,95	..	31,02
7	Intensification of production and distribution of improved seeds.	68,80	..	..	68,80	..	49,00	..	49,00	19,80	..	..	19,80
8	Development of manures and fertilisers.	90	..	..	90	18	..	..	18	72	..	..	72
9	Crop Protection	6,65	..	..	6,65	..	..	..	..	6,65	..	..	6,65
10	Research and Development of Horticulture.	14,84	..	..	14,84	7,42	..	..	7,42	7,42	..	..	7,42
11	Research and Development of Sugarcane	67,75	..	..	67,75	30,00	..	..	30,00	37,75	..	..	37,75
12	Research and Development of Cotton ..	30,00	..	..	30,00	..	..	..	..	30,00	..	..	30,00
13	Research and Development of Oilseeds.	5,05	..	..	5,05	2,50	..	..	2,50	2,55	..	..	2,55
14	Mechanical cultivation	49,50	..	..	49,50	97	..	..	97	48,53	..	..	48,53
15	Grants-in-aid to agricultural associations for extension work and demonstration shows.	2,00	..	..	2,00	..	..	..	..	2,00	..	..	2,00
	Total: *Agricultural Production* ..	354,48	31,83	..	386,31	82,78	53,25	..	136,03	224,90	25,38	..	250,28

HEAD OF DEVELOPMENT : *Agriculture and Community Development*—contd.

(Rs. in thousands)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Land Development												
16	Refresher Courses for Agricultural Officers and Agricultural Assistants and for deputation of officers for training abroad.	3,00	..	..	3,00	1,12	..	..	1,12	1,88	..	..	1,88
17	Survey and Research in Soil Conservation	4,62	..	..	4,62	2,31	..	..	2,31	2,31	..	..	2,31
18	Soil Conservation Works	106,00	..	198,00	304,00	53,20	..	198,00	251,20	52,80	..	..	52,80
19	Land Utilisation Survey of Government Waste Lands.	4,30	..	..	4,30	2,15	..	..	2,15	2,15	..	..	2,15
20	Introduction of Survey and Settlement.	195,34	..	..	195,34	..	..	..	..	195,34	..	..	195,34
21	Prevention of Fragmentation and Consolidation of Holdings.	70,20	..	..	70,20	..	..	..	..	70,20	..	..	70,20
22	Reclamation of Khar and Khajan Lands.	19,94	..	..	19,94	498·5	..	..	498·5	1405·5	..	..	1495·5
23	Introduction of Record of Rights in Khoti and Inam Villages.	26.88	..	..	26,83	..	..	..	..	26,83	..	..	26,83
	Total : *Land Development* ..	430,23	..	198,00	628,23	6876·5	..	198,00	261,76·5	366,46·5	..	..	366,46·5
	Minor Irrigation												
24	Jamda Left Bank Canal												
25	Sayadnagar Bandhara												
26	Girna (Right Bank) Extension Canal..												
27	Khadak Ozar	Spillover.	329,57·5	..	329,57·5	..	..	329,57·5	329,57·5	..	..	..	..
28	Karwand Dam												
29	Vairag Tank												
30	Other works including Tube wells..												

31 New works	..	150,00	..	150,00	..	..	150,00	150,00	..	..	..	..
32 Tube wells	..	150,00	..	150,00	..	..	150,00	150,00	..	..	..	..
33 Improvement of Irrigation wells ..	7,27	..	..	7,27	..	..	..	..	7,27	..	..	7,27
Total: *Minor Irrigation* ..	7,27	62957·5	..	63684·5	..	..	62957·5	62957·5	7,27	..	..	7,27
Warehousing and Marketing												
34 Marketing Survey and Research ..	1,00	..	..	1,00	50	..	..	50	50	..	..	50
35 Development of Agricultural marketing	1,45	..	80,00	81,45	15	..	40,00	40,15	1,30	..	40,00	41,30
36 Co-ordinated Marketing News Service	2,23	..	..	2,23	1,12	..	..	1,12	1,11	..	..	1,11
37 Development of Warehousing ..	..	50,00	..	50,00	..	..	25,00	25,00	..	25,00	..	25,00
38 Grading	1,63	..	..	1,63	82	..	..	82	81	..	..	81
39 Development of Co-operative Marketing	29,06	41,00	91,00	161,06	14,00	..	71,40	85,40	15,06	41,00	19,60	75,66
Total: *Warehousing and Marketing* ..	35,37	91,00	171,00	297,37	16,59	..	136,40	152,99	18,78	66,00	59,60	144,38
Animal : Husbandry												
40 Advanced Training of Agricultural officers in Animal Husbandry at Izatnagar.	1,20	..	..	1,20	..	..	..	..	1,20	..	..	1,20
41 Expansion of the supervisory staff of the Veterinary Department	3,36	..	..	3,36	..	..	..	..	3,36	..	..	3,36
42 Expansion of the Bombay Veterinary College	1,50	..	..	1,50	..	..	..	..	1,50	..	..	1,50
43 Training of stockmen	3,46	..	..	3,46	..	..	..	..	3,46	..	..	3,46
44 Establishment of a Disease Research Station at Poona.	..	1,70	..	1,70	1,70	..	..	1,70	..	..	..	..
45 Scheme for study of cattle sterility	1,67	..	..	1,67	83·5	..	..	83·5	83·5	..	..	83·5
46 Scheme for investigation of Mastitis	56	..	..	56	28	..	..	28	28	..	..	28
47 Scheme for control of main-fluke diseases.	60	..	..	60	30	..	..	30	30	..	..	30

HEAD OF DEVELOPMENT : *Agriculture and Community Development*—contd.

(Rs. in thousands)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
48	Introduction of Artificial Insemination.	3,00	....	..	3,00	..	..	....	....	3,00	..	..	3,00
49	Assumption of full control of Veterinary Dispensaries by Government.	10,80	....	..	10,80	..	..	....	....	10,80	..	..	10,80
50	Expansion of the Serum and Vaccine Institute for manufacture of sera and vaccines.	3,22	....	..	3,22	..	..	....	....	3,22	..	..	3,22
51	Immunisation of cattle against diseases.	12,76	....	..	12,76	..	..	....	....	12,76	..	..	12,76
52	Eradication of rinderpest	14,10	....	..	14,10	6,02	..	....	6,02	8,08	..	..	8,08
53	Mass immunisation of village poultry against Ranikhet disease.	41	....	..	41	20·5	..	....	20·5	20·5	..	..	20·5
54	Research and Development of Sheep ..	14,65	....	..	14,65	6,50	..	....	6,50	8,15	..	..	8,15
55	Research and Development of Cattle ..	20,70	....	..	20,70	8,50	..	....	8,50	12,20	..	..	12,20
56	Research and Development of Poultry ..	15,00	....	..	15,00	14,30	..	....	14,30	70	..	..	70
	Total : *Animal Husbandry* ..	106,99	1,70	..	108,69	38,64	..	....	38,64	70,05	..	..	70,05
	Dairying and Milk Supply.												
57	Milk Supply Scheme for cities in Bombay State.	40,00	....	..	40,00	..	..	....	....	40,00	..	..	40,00
58	Additional Staff for the Dairy Development Section.	1,00	....	..	1,00	..	..	....	....	1,00	..	..	1,00
59	Establishment of rural milk producing centres for milk supply to cities.	10,40	....	....	10,40	....	....	....	....	10,40	....	....	10,40
60	Expansion of the Poona Milk Supply Scheme.	36,72	....	....	36,72	....	....	....	....	36,72	....	....	36,72
61	Milk Supply Scheme for Greater Bombay and Development of National Park.	....	300,00	....	300,00	....	50,00	....	50,00	....	250,00	....	250,00
	Total : *Dairying and Milk Supply* ..	88,12	300,00	....	388,12	....	50,00	....	50,00	88,12	250,00	....	338,12

Forests												
62 Additional staff for management of the Thana and Nasik Woodlands	6,78·4	....	....	6,78·4	....	....	6,78·4	6,78·4	6,78·4	....	—6,78·4	....
63 Conversion of existing Banaskantha Sub-Divisions into Divisions	2,74	....	....	2,74	....	....	....	....	2,74	....	....	2,74
64 Intensification of checking forest produce in transit	3,27	....	....	3,27	....	....	....	....	3,27	....	....	3,27
65 Opening of Regional Foresters' Training Classes	1,05·6	....	....	1,05·6	....	....	....	....	1,05·6	....	....	1,05·6
66 Survey of oil bearing trees ..	30	....	....	30	15	....	....	15	15	....	....	15
67 Survey of merged State areas ..	5,00	....	....	5,00	2,50	....	....	2,50	2,50	....	....	2,50
68 Land improvement anti-erosion and water conservation works	4,00	....	....	4,00	50	....	3,00	3,50	3,50	....	—3,00	50
69 Opening of soil conservation demonstration centres	3,41·5	....	....	3,41·5	1,70·7	....	....	1,70·7	1,70·8	....	....	1,70·8
70 Soil Conservation Scheme for Ratnagiri District	15,00	....	....	15,00	1,87·5	....	11,25	13,12·5	13,12·5	....	—11,25	11,87·5
71 Afforestation of arid and blank areas ..	53,52	....	....	53,52	....	....	53,52	53,52	53,52	....	—53,52	....
72 Afforestation and rehabilitation of pasture lands	38,33	....	....	38,33	....	....	38,33	38,33	38,33	....	—38,33	....
73 Planting of Agave hedges	6,40	....	....	6,40	....	....	6,40	6,40	6,40	....	—6,40	....
74 Forest Rehabilitation Scheme ..	7,67	....	....	7,67	3,83·5	....	....	3,83·5	3,83·5	....	....	3,83·5
75 Immobilisation of the Runn of Kutch ..	8,71	....	....	8,71	1,08·9	....	6,58.2	7,62·1	7,62·1	....	—6,58·2	1,08·9
76 Rehabilitation of forest area with teak where bamboo flowering is imminent	4,00	....	....	4,00	2,00	....	....	2,00	2,00	....	....	2,00
77 Propagation of Bamboos	5	....	....	5	....	....	5	5	5	....	—5	....
78 Aerial Ropeway ..	4,00	....	....	4,00	....	....	4,00	4,00	4,00	....	—4,00	....
79 Scheme regarding matchwood plantations	4,33	....	....	4,33	2,16·5	....	....	2,16·5	2,16·5	....	....	2,16·5
80 Establishment of Permanent Wet Nurseries	15,00	....	....	15,00	....	....	....	....	15,00	....	....	15,00
81 Installation of Walkie Talkie wireless sets	7,70	....	....	7,70	....	....	....	....	7,70	....	....	7,70
82 Intensification of demonstration of the methods of lac cultivation	2,83	....	....	2,83	....	....	2,83	2,83	2,83	....	—2,83	....
83 Cultivation of medicinal plants ..	62·4	....	....	62·4	....	....	....	....	62·4	....	....	62·4

HEAD OF DEVELOPMENT : *Agriculture and Community Development*—contd.

(Rs. in Thousands)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	***Forests* (Contd.)**												
84	Restarting of Waghai Saw Mill ..	2,59·6	....	....	2,59·6	....	....	....	....	2,59·6	....	....	2,59·
85	Teak plantations	8,40	....	....	8,40	....	....	8,40	8,40	8,40	....	–8,40	...
86	Communications	12,50	....	....	12,50	....	....	12,50	12,50	12,50	....	–12,50	....
87	Forest buildings and wells	14,00	....	....	14,00	....	....	....	....	14,00	....	....	14,00
88	Village Forest Panchayat Scheme ..	4,00	....	....	4,00	....	....	4,00	4,00	4,00	....	–4,00	....
89	Establishment of Wild life game sanctuaries	5,00	....	....	5,00	2,50	....	....	2,50	2,50	....	....	2,50
	Total : *Forests* ..	241,22·5	....	....	241,22·5	18,32·1	....	157,59·6	175,91·7	222,90·4	....	–157,59·6	65,30·8
	Fisheries												
90	Strengthening of the staff of the Fisheries Department	2,80	....	....	2,80	....	....	....	....	2,80	....	....	2,80
91	Demonstration of Mechanised Fishing in Under Developed areas	2,43	....	....	2,43	....	....	....	....	2,43	....	....	2,43
92	Training of fisher-youths as mechanics, etc.	81	....	....	81	....	....	....	....	81	....	....	81
93	Establishment of marine biological research station at Ratnagiri	2,50	1,68	....	4,18	....	....	....	....	2,50	1,68	....	4,18
94	Extension of the fisheries Technological Laboratory and Manufacture of shark liver oil with malt extract	2,74	70	....	3,44	....	....	....	....	2,74	70	....	3,44
95	Extension of the Taraporewalla Acquarium building	....	80	....	80	....	....	....	....	....	80	....	80
96	Establishment of fish farms at Poona, Nasik and other centres	6,31	....	....	6,31	3,15·5	....	....	3,15·5	3,15·5	....	....	3,15·5
97	Stocking of inland waters with carp fry	1,18	....	....	1,18	59	....	....	59	59	....	....	59

97	Development of fisheries in deeptanks ..	1,71	....	....	1,71	86	....	....	86	85	....	....	85
98	Mechanisation of fishing crafts ..	13,95·5	....	13,95·5	27,91	6,97·7	....	....	6,97·7	6,97·8	....	13,95·5	20,93 8
100	Establishment of ice and cold storage plants etc. Development of marketing of fish in hinter lands	76	....	1,58	2,34	....	....	79	79	76	....	79	1,55
101	Improvement of landing and harbour facilities.	6,00	....	....	6,00	3,00	....	....	3,00	3,00	....	....	3,00
102	Improvement of curing facilities at fish curing yards.	80	....	....	80	....	....	....	....	80	....	....	80
103	Development of pearl fishing at Okhamandal, Jaitapur and other areas	56	....	....	56	....	....	....	....	56	....	....	56
104	Grant of loans for the development of other aspects of fisheries	....	....	10,00	10,00	....	....	....	....	....	....	10,00	10,00
105	Establishment of service stations at Satpati and Bassein	76	....	....	76	....	....	....	....	76	....	....	76
106	Grant of loans and subsidy for establishment of a boat building yard	50	....	50	1,00	25	..	....	25	25	..	50	75
	Total ; *Fisheries* ..	43,81·5	3,18	26,03·5	73,03	14,83·2	..	79	15,62·2	28,98.3	3,18	25,24·5	57,40·8
	Community Projects, National Extension Service and Rural Development												
§107	Expansion of the Community Projects and National Extension Service Programme	1532·00	....	868,00	2400,00	960,00	..	868,00	1828,00	572,00	..	..	572,00
108	Local Development Works Programme	40,00	....	..	40,00	..	..	....	....	40,00	..	..	40,00
109	Sarvodaya Development ..	75,00	....	10,00	85,00	..	..	....	....	75,00	..	10,00	85,00
110	Grant to District Development Boards for agricultural and cattle shows	2,02·5	....	..	2,02·5	..	..	....	....	2,02·5	..	..	2,02·5
111	Discretionary grants to Collectors for rural development	2,56·5	....	..	2,56·5	..	..	....	....	2,56·5	..	..	2,56·5
112	Financial assistance to village Panchayat in Advisa and Backward areas	16,00	....	..	16,00	..	..	....	....	16,00	..	..	16,00
§113	Grant-in-aid for development of village panchayats	391,90	....	..	391,90	..	..	....	....	391,90	..	..	391,90
	Total : *Community Projects etc.* ..	2059,49	....	878,00	2937,49	960,00	..	868,00	1828,00	1099,49	..	10,00	1109,49

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§ The provisions for Community Development Projects, National Extension Service and Village Panchayats are tentative and are being settled in consultation with the Planning Commission.

HEAD OF DEVELOPMENT : *Agriculture and Community Development*—concld.

(Rs. in thousand)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Co-operation												
114	Reorganisation of the administrative set up of the Co-operative Department.	15,04	....	..	1504	..	..	....	....	15,04	..	..	15,04
115	Reorganisation of the administrative set up for the implementation of the Bombay Money Lenders' Act.	8,15	....	..	8,15	..	..	....	....	8,15	..	..	8,15
116	Expansion of the Statistical Section in the Co-operative Department	4,65	....	..	4,65	..	..	....	....	4,65	..	..	4,65
117	Co-operative Training, Education and Propaganda	39,00	....	..	39,00	19,28	..	....	19,28	19,72	..	..	19,72
118	Extension of agricultural credit ..	60,56	....	25,25	85,81	20,38	..	12,63	33,01	40,18	..	12,62	52,80
119	Relief and guarantee fund for extension of credit	30,00	....	....	30,00	....	..	....	....	30,00	..	..	30,00
120	Organisation of Grain depots ..	..	....	12,50	12,50	..	..	6,25	6,25	..	..	6,25	6,25
121	Co-operative Farming ..	13,15	5,60	27,75	46,50	5,55	..	16,68	22,23	7,60	2,80	13,87	24,27
122	Co-operative Lift Irrigation ..	15,35	....	27,10	42,45	5,09	..	13,55	18,64	10,26	..	13,55	23,81
123	Co-operative fisheries	1,17	....	10,00	11,17	....	..	5,00	5,00	117	..	5,00	6,17
124	Organisation of Processing societies other than Co-operative sugar factories	4,25	37,00	8,25	49,50	1,81	..	22,63	24,44	2,44	18,50	4,12	25,06
125	Organisation of Fruit and vegatable societies												
126	Organisation of Milk Producers' Societies and Unions	3,47	....	4,40	7,87	1,29	..	2,20	3,49	2,18	..	2,20	4,38
127	Organisation of Co-operative Electricity Production Societies.	2,40	....	1,401	1,641	1,20	....	7,01	8,21	1,20	....	7,00	8,20
128	Rehabilitation of nomadic cattle breeders	6,56	6,24	10,84	23,64	3,09	....	8,54	11,03	3,47	8,12	5,42	12,01
129	Subsidised Industrial Housing Scheme	56	....	....	56	....	....	....	....	56	....	....	56
	Total : *Co-operation* ..	204,31	48,84	1,40,10	393,25	57,69	....	94,49	152,18	146,62	24,42	70,03	24,107

Miscellaneous												
130 Scheme for surveying of sites for possible national parks	12	....	....	12	6	....	....	6	6	....	....	6
131 Development of Sayajibag at Baroda. ..	12	1,45	....	1,57	6	72	....	78	6	73	....	79
132 Development of hot water springs at Vajreshwari	20	3,00	....	3,20	....	....	....	....	20	3,00	....	3,20
133 Establishment of a national park at Sinhgad	25	6,95	....	7,20	12	3,48	....	3,60	13	3,47	....	3,60
134 Establishment of a national park at Elephanta Island	71	4,00	....	4,71	35	2,00	..	2,35	36	2,00	....	2,36
135 Development of landscape around Unai hot water springs in Surat District	80	2,40	....	3,20	....	....	....	....	80	2,40	....	3,20
136 Additional requirements of and expansion of existing nurseries	1,57	....	....	1,57	....	....	....	....	1,57	....	....	1,57
Total : *Miscellaneous* ..	3,77	17,80	....	21,57	59	6,20	....	6,79	3,18	11,60	....	14,78
Total—Agriculture and Community Development. ..	35,75,07	11,28,92·5	14,13,13·5	61,12,18	12,53,20·8	109,45	20,84,85·1	3447,50·9	22,76,76·2	380,58	727·9	26,04,62·1

HEAD OF DEVELOPMENT : *Irrigation and Power*

Multipurpose Projects												
137 Koyna Project (including Koyna Sholapur Scheme)	....	3200,00	....	3200,00	....	....	3200,00	3200,00	....	....	....	....
138 Ukai Project	....	750,00	....	750,00	....	....	750,00	750,00	....	....	....	....
Total : *Multipurpose Projects* ..	....	3950,00	....	3950,00	....	....	3950,00	3950,00	....	....	....	....
Major and Medium Irrigation Projects												
A—Major Irrigation Projects												
I. Gujarat												
139 Mahi (Kadana Reservoir) Project ..	....	500,00	....	500,00	....	....	....	....	....	....	....	....
*140 Sabarmati Project	....	100,00	....	100,00	....	....	....	....	....	....	....	....
141 Narmada Project	....	300,00	....	300,00	....	....	....	....	....	....	....	....
142 Banas Valley Project	....	300,00	....	300,00	....	....	....	....	....	....	....	....
Total : *A-I*	....	1200,00	....	12,00,00	....	....	....	....	....	....	....	....

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*The provision for Sabarmati Project is tentative and is being settled in consultation with the Planning Commission.

MO-B H 1150—11a

HEAD OF DEVELOPMENT: *Irrigation and Power*—contd.

(Rs. in thousand)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	II. Maharashtra												
143	Vir Dam Project ..	....	450,00	....	450,00	....	....	....	....	....	....	....	....
144	Khadakwasla Project	....	300,00	....	300,00	....	....	....	....	....	....	....	....
145	Mula Project	....	300,00	....	300,00	....	....	....	....	....	....	....	....
146	Girna Project	....	400,00	....	400,00	....	....	....	....	....	....	....	....
	Total : *A-II* ..	....	1450,00	....	1450,00	....	....	....	....	....	....	....	....
	III. Karnatak												
147	Ghataprabha Project, Stage II ..	....	650,00	....	650,00	....	....	....	....	....	....	....	....
	Total : *A-III* ..	....	650,00	....	650,00	....	....	....	....	....	....	....	....
	IV. Projects carried over from the First Five-Year Plan												
148	Gangapur Dam Project ..	....	101,52	....	101,52	....	....	....	....	....	....	....	....
149	Ghataprabha Left Bank Canal Project.	....	33,96	....	33,96	....	....	....	....	....	....	....	....
150	Mahi Right Bank Canal Project ..	....	410,98	....	410,98	....	....	....	....	....	....	....	....
151	Ranand Tank	....	3,11	....	3,11	....	....	....	....	....	....	....	....
152	Kolchi Weir Project	....	6,88	....	6,88	....	....	....	....	....	....	....	....
153	Kakrapar Project	....	479,83	....	479,83	....	....	....	....	....	....	....	....
	Deduct Probable Savings ..	....	—36,28	....	—36,28	....	....	....	....	....	....	....	....
	Total : *A-IV* ..	....	1000,00	....	1000,00	....	....	....	....	....	....	....	....
	Total: *Major Irrigation Projects* ..	....	4300,00	....	4300,00	....	....	....	....	....	....	....	....

B—Medium Irrigation Projects.												
I. Gujarat												
154 Saraswati River Scheme	....	150,00	....	150,00	....	....	....	....	....	....	....	....
155 Hatmati Reservoir Scheme	....	150,00	....	150,00	....	....	....	....	....	....	....	....
156 Shetrunji Project	....	120,00	....	120,00	....	....	....	....	....	....	....	....
157 Shamalaji Project	....	100,00	....	100,00	....	....	....	....	....	....	....	....
Total : *B-I*	....	520,00	....	520,00	....	....	....	....	....	....	....	....
II. Maharashtra												
158 Gangapur Storage Stage II	....	170,00	....	170,00	....	....	....	....	....	....	....	....
159 Varna Project	....	160,00	....	160,00	....	....	....	....	....	....	....	....
160 Kurnur Project	....	260,00	....	260,00	....	....	....	....	....	....	....	....
Total : *B-II*	....	590,00	....	590,00	....	....	....	....	....	....	....	....
III. Karnatak												
161 Dharma Project	....	80,00	....	80,00	....	....	....	....	....	....	....	....
Total : *B-III*	....	80,00	....	80,00	....	....	....	....	....	....	....	....

HEAD OF DEVELOPMENT : *Irrigation and Power*—contd.

(Rs. in thousands)

Serial No.	Scheme	Five-Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
IV.	***Projects carried over from the First Five-year Plan***												
	Gujarat												
162	Harnav River Weir Scheme	....	5,80	....	5,80	....	....	....	....	....	....	....	....
163	Constructing a tank at Karol	....	1,55	....	1,55	....	....	....	....	....	....	....	....
164	Moti Fatewadi Canal Scheme	....	14,00	....	14,00	....	....	....	....	....	....	....	....
165	Patadungri Tank Scheme ..	....	6,10·7	....	6,10·7	....	....	....	....	....	....	....	....
166	Bandhara across Heran River	....	3,15	....	3,15	....	....	....	....	....	....	....	....
167	Karad Tank Scheme ..	....	65,26·7	....	65,26·7	....	....	....	....	....	....	....	....
168	Bandhara across Ver River	....	0·28	....	0·28	....	....	....	....	....	....	....	....
169	Raising Doshwada Tank ..	....	0·02	....	0·02	....	....	....	....	....	....	....	....
	Maharashtra												
170	Ghod Weir Scheme ..	....	350,00	....	350,00	....	....	....	....	....	....	....	....
171	Extension of Krishna Canal	....	50,88·7	....	50,88·7	....	....	....	....	....	....	....	....
172	Mosam River Weir Scheme	....	14,62	....	14,62	....	....	....	....	....	....	....	....
173	Pushpawati Bandhara ..	....	0·09	....	0·09	....	....	....	....	....	....	....	....
174	Budhial Tank	....	15,02·6	....	15,02·6	....	....	....	....	....	....	....	....
175	Bandhara on Tarali River ..	....	7·4	....	7·4	....	....	....	....	....	....	....	....
176	Bandhara on Urmodi River	....	34·5	....	34·5	....	....	....	....	....	....	....	....
177	Percolation Tank at Bori ..	....	35·	....	35·	....	....	....	....	....	....	....	....
	Karnatak												
178	Bandhara at Lakhanpur ..	....	1,04·9	....	1,04·9	....	....	....	....	....	....	....	....
179	Bandhara at Kalloli ..	....	0·8	....	0·8	....	....	....	....	....	....	....	....
180	Tank at Ramanhalli ..	....	23,34	....	23,34	....	....	....	....	....	....	....	....

181 Tank at Kalaskop	....	9,78·7	....	9,78·7	....	....	....	....	....	....	....	....
182 Tank at Hullur	....	10,76·5	....	10,76·5	....	....	....	....	....	....	....	....
183 Improvements to tank at Survey No. 198 at Ganjigatti	....	3,51	....	3,51	....	....	....	....	....	....	....	....
184 Irrigation Tank at Arwatgi ..	....	1,06	....	1,06	....	....	....	....	....	....	....	....
185 Irrigation Tank at Benchi	....	56·3	....	56·3	....	....	....	....	....	....	....	....
186 Improvements to tank in Survey No. 202 at Hommardi	....	4,23	....	4,23	....	....	....	....	....	....	....	....
187 Add *Extra* for less expenditure than budgetted in 1955-56	....	18,50	....	18,50	....	....	....	....	....	....	....	....
Total: *B-IV* ..	....	600,00	....	600,00	....	....	....	....	....	....	....	....
Total: *Medium Irrigation Projects* ..	....	1790,00	....	1790,00	....	....	....	....	....	....	....	....
Total: *Major and Medium Irrigation Projects*	....	6090,00	....	6090,00	....	....	....	....	....	....	....	....
Power Projects—Thermal												
188 South Gujarat Electric Grid Scheme ..	....	....	400,00	400,00	....	....	....	....	....	....	....	....
Total: *Power Projects—Thermal* ..	....	....	400,00	400,00	....	....	....	....	....	....	....	....
Power Projects—Distribution												
189 North Gujarat Electric Grid Scheme ..	....	....	64,00	64,00	....	....	....	....	....	....	....	....
190 Jog Distribution Scheme ..	....	....	60,00	60,00	....	....	....	....	....	....	....	....
191 For completion of the Projects started under the First Five-Year Plan	....	....	371,00	371,00	....	....	....	....	....	....	....	....
Total: *Power Projects—Distribution* ..	....	....	495,00	495,00	....	....	....	....	....	....	....	....

HEAD OF DEVELOPMENT : *Irrigation and Power*—concld.

(Rs. in thousands)

Serial No.	Scheme	Five-Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Investigation and Survey												
192	Investigation and Survey of Power Projects	....	500	....	500	....	....	....	....	....	....	....	....
	Total : *Investigation and Survey* ..	....	500	....	500	....	....	....	....	....	....	....	....
	Research												
193	Road-*cum*-Irrigation Research Institutions	10,00	40,00	....	50,00	....	....	....	....	....	....	....	....
	Total : *Research* ..	10,00	40,00	....	50,00	....	....	....	....	....	....	....	....
	Total : Irrigation and Powar ..	10,00	10085,00	895,00	10990,00	....	....	10532,50*	10,532,50*	10,00*	....	447,50	457,50

HEAD OF DEVELOPMENT : *Industry and Mining*

Serial No.	Scheme	Five-Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
	Administrative Staff												
194	Expansion of the Head-quarters' staff in the Department of Industries	80	....	....	80	....	....	....	....	80	....	....	80
195	Scheme for collection of Industrial Statistics	3,95	....	....	3,95	....	....	....	....	3,95	....	....	3,95
	Total: *Administrative Staff* ..	4,75	....	....	4,75	....	....	....	....	4,75	....	....	4,75

	Industrial Finance												
196	State Industrial Finance Corporation ..	....	31,00	....	31,00	....	....	....	....	....	31,00	....	31,00
	Total: *Industrial Finance* ..	....	3,100	....	31,00	....	....	....	....	....	31,00	....	31,00
	Industrial Estates and Townships												
197	Establishment of Industrial Trading Estates	4,32·3	71,63	10,00	85,95·3	....	....	....	....	4,32·3	71,63	10,00	85,95·3
	Total: *Industrial Estates and Townships* ..	4,32·3	71,63	10,00	85,95·3	....	....	....	....	4,32·3	71,63	10,00	85,95·3
	Village and Small Industries												
198	Reorganisation of the Industrial Co-operatives and Village Industries Section	15,00·1	....	....	15,00·1	4,73	....	....	4,73	10,27·1	....	....	10,27·1
199	Unemployment Relief-*cum*-Vocational Training-*cum*-Production Centres	130,00	....	....	130,00	47,80	....	36,80	84,60	82,20	....	—36,80	45,40
200	Organisation of post-Training production centres in backward areas	2,64	....	....	2,64	28	....	....	28	2,36	....	....	2,36
201	Starting production centres for Chrome upper and picking bands	3,14·6	1,92	....	5,06·6	1,10	....	1,92	3,02	2,04·6	1,92	—1,92	2,04·6
202	Organisation of re-tanning and finishing centres in backward areas	1,66	....	....	1,66	68	....	....	68	98	....	....	98
203	Starting a production centres in pit tanned leather.	2,95·2	....	....	2,95·2	60	....	1,10	1,70	2,35·2	....	—1,10	1,25·2
204	Manufacture of screw-drivers, locks, etc	6,90	3,10	....	10,00	2,28	....	3,10	5,38	4,62	3,10	—3,10	4,62
205	Organisation of a poly-technic in Cottage Industries	4,75	....	....	4,75	99	....	....	99	3,76	....	....	3,76
206	Research in Cottage Industries ..	7,47·5	....	....	7,47·5	2,95	....	79	3,74	4,52·5	....	—79	3,73·5
207	Scheme for achievements audit for the purpose of evaluation of work done for development of small industries	2,00	....	....	2,00	70	....	....	70	1,30	....	....	1,30
208	Collection of Industrial Statistics for certain Cottage Industries·	2,34	....	....	2,34	....	....	....	....	2,34	....	....	2,34

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*A loan assistance of Rs. 105·3 crores on all the Irrigation and Power Projects is estimated from the Government of India. This includes the entire amount of Rs. 39·5 crores on the Multi-Purpose projects and further amount of Rs. 6,00 crores on the Medium Irriagtion Projects carried over from the First Five-Year Plan, the balance being Central Assistance for other Projects for which separate figures are not shown.

HEAD OF DEVELOPMENT : *Industry and Mining*—contd.

(Rs. in thousands)

Serial No.	Scheme	Five Year Cost				Central Assistance				Cost to state Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	***Village and Small Industries*—contd.**												
209	Village Industries schemes proposed by the Bombay State Village Industries Board	20,00	....	....	20,00	....	....	....	....	20,00	....	....	20,00
210	Development of Handloom Industries..	50,00	....	50,00	100,00	50,00	....	50,00	100,00	....	....	....	....
211	Development of Coir Industries ..	3,01·7	....	1,94·3	4,96	2,11·4	....	....	2,11·4	90·3	....	1,94·3	2,84·6
212	Development of Pottery Industry ..	2,77	....	....	2,77	84	....	40	1,24	1,93	....	—40	1,53
213	Development of Sericulture ..	3,95·3	....	....	3,95·3	57	....	....	57	3,38·3	....	....	3,38·3
214	Development of Tanning and Leather working Industries	4,95·6	....	15,27·1	20,22·7	1,26	....	11,85	13,11	3,69·6	....	3,42·1	7,11·7
215	Development of Woollen Industry ..	8,50	....	....	8,50	8,50	....	....	8,50	....	....	....	....
216	Introduction of Rural Industrialisation Scheme	1,00	....	....	1,00	....	....	....	....	1,00	....	....	1,00
217	Scheme for affording marketing facilities to cottage industries products	3,00	....	....	3,00	45	....	....	45	2,55	....	....	2,55
218	Grant of loans to Small Scale and Cottage Industries	....	....	270,00	270,00	....	....	180,00	180,00	....	....	90,00	90,00
219	Organisation of Co-operative Sugar Factories	2,07	50,00	....	52,07	....	....	25,00	25,00	2,07	25,00	....	27,07
	Total: *Village and Small Industries* ..	278,13	55,02	337,21·4	670,36·4	125,84·4	....	310,96	436,80·4	152,28·6	30,02	51,25·4	233,56
	Organisation of Industrial Co-operative Societies												
220	Organisation of District Industrial Co-operative Associations	2,24·3	....	....	2,24·3	....	....	....	....	2,24·3	....	....	2,24·3
221	Organisation and grant of Financial Assistance to Forest Labourers' Co-operative Societies	....	....	....	....	....	....	....	....	....	....	....	....
					(Provision shown against scheme No. 380 under "Other Social Services")								
222	Organisation and grant of Financial Assistance to Labour Contract Societies	3,00	....	....	3,00	1,50	....	....	1,50	1,50	....	....	1,50

223	Organisation of Co-operative Societies other than Labour Contract and Forest Labourers' Societies in Backward areas	1,80	....	....	1,80	1,35	....	....	1,35	45	....	....	45
224	Organisation of Regional and District Industrial Co-operative Banks	48	1,80	....	2,28	....	....	....	....	48	1,80	....	2,28
225	Scheme for contribution to the share capital of Industrial Co-operative Societies including District Industrial Co-operative Associations	....	55,70	....	55,70	....	27,85	....	27,85	....	27,85	....	27,85
	Total: *Organisation of Industrial Co-operative Societies*	12,20·3	57,50	....	65,02·3	7,53	27,85	....	35,38	4,67·3	29,65	....	34,32·3
	Geological Surveys and Prospecting												
226	Expansion of the Geological Section ..	1,04·5	....	....	1,04·5	....	....	....	....	1,04·5	....	....	1,04·5
	Total: *Geological Surveys and Prospecting* ..	1,04·5	....	....	1,04·5	....	....	....	....	1,04·5	....	....	1,04·5
	Miscellaneous.												
227	Establishment of a permanent Industrial Exhibition in Bombay	....	....	30,00	30,00	....	....	15,00	15,00	....	....	15,00	15,00
228	Adoption of Metric System of weights and measures in Bombay State	95	....	....	95	....	....	....	....	95	....	....	95
229	Establishment of a Government Test House at the Industrial Research Laboratory, Matunga	80	60	....	1,40	....	....	....	....	80	60	....	1,40
230	Expansion of the Industrial Chemist's Laboratory, Baroda	29·9	1,00	....	1,29·9	....	....	....	....	29·9	1,00	....	1,29·9
231	Establishment of an Industrial Chemist's Laboratory, Poona	67·7	1,00	....	1,67·7	....	....	....	....	67·7	1,00	....	1,67·7
232	Industrial Research and Pilot Plants ..	1,40	60	....	2,00	....	....	....	....	1,40	60	....	2,00
	Total: *Miscellaneous* ..	4,12·6	3,20	30,00	37,32·6	....	....	15,00	15,00	412·6	3,20	15,00	22,32·6
	Total: Industry and Mining ..	299,89·7	218,35	377,21·4	8,95,46·1	128,69·4	27,85	325,96	482,50·4	171,20·3	165,50	76,25·4	412,95·7

HEAD OF DEVELOPMENT : *Transport and Communications*

(Rs. in thousands)

Serial No.	Name of Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Roads												
233	Road Development	....	1265,00	....	1265,00	....	....	....	....	....	1265,00	....	1265,00
234	Village Approach Roads	....	400,00	....	400,00	....	....	....	....	....	400,00	....	400,00
235	Scheme for Central Road-cum-Irrigation Research Institute (Road Research part) [*vide* also item (*i*) under, '18-Research', under the head "Irrigation and Power "]	....	15,00	....	15,00	....	....	....	....	....	15,00	....	15,00
	Road Transport												
236	Extension of Nationalisation of passenger Transport*	....	375,00	....	375,00	....	....	....	....	....	375,00	....	375,00
	Ports and Harbours												
237	Development of Intermediate and Minor Ports**	67,00	16,00	....	83,00	....	....	16,00	16,00	67,00	....	....	67,00
	Total : Transport and Communications	67,00	2071,00	....	2138,00	....	....	16,00	16,00	67,00	2055,00	....	2122,00

HEAD OF DEVELOPMENT : *Education.*

Serial No.	Name of Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
	Primary												
238	Training of Primary Teachers ..	20,00	....	....	20,00	....	....	....	....	20,00	....	....	20,00
239	Introduction of compulsory Primary Education	220,00	....	....	220,00	68,00	....	....	68,00	152,00	....	....	152,00
240	Conversion of Primary Schools into Basic Schools	41,00	....	....	41,00	12,30	....	....	12,30	28,70	....	....	28,70
241	Strengthening of Inspection staff ..	9,60	....	....	9,60	....	....	....	....	9,60	....	....	9,60
242	Organisation of Refresher Courses for Teachers in craft Schools	3,10	....	....	3,10	....	....	....	....	3,10	....	....	3,10

243	Educational Surveys	60	....	....	60	....	....	....	....	60	....	....	60
244	Construction of buildings, for lower and upper grade primary schools	..	....	140,00	140,00	....	....	....	....	....	....	140,00	140,00
	Secondary												
245	Training of Secondary Teachers ..	2,80	....	....	2,80	....	....	....	....	2,80	....	....	2,80
246	Refresher courses and seminars for Secondary Teachers	4,30	....	....	4,30	2,15	....	....	2,15	2,15	....	....	2,15
247	Establishment of multilateral schools ..	34,62	....	....	34,62	16,81	....	....	16,81	17,81	....	....	17,81
248	Hostel facilities for Secondary School Students	..	....	10,00	10,00	....	....	....	....	....	....	10,00	10,00
249	Payment of grants to Secondary Schools	100,00	....	....	100,00	....	....	....	....	100,00	....	....	100,00
250	Building Loans for Secondary Schools ..	..	....	80,00	80,00	....	....	....	....	....	....	80,00	80,00
251	Loan Scholarships for pupils in Secondary Schools	..	....	5,00	5,00	....	....	....	....	....	....	5,00	5,00
252	Additional Scholarships for students in Secondary Schools	2,40	....	....	2,40	....	....	....	....	2,40	....	....	2,40
253	Additional free studentships to pupils in Secondary Schools	36,00	....	....	36,00	....	....	....	....	36,00	....	....	36,00
254	Audiovisual education in Secondary Schools	400	......	......	400	1,58	....	....	1,58	2,42	....	....	2,42
	Technical and Vocational (Non-University).												
255	Expansion of the Office of the Director of Technical Education	2,40	....	....	2,40	....	....	....	....	2,40	....	....	2,40
256	Establishment of District Polytechnics	66,02	30,00	....	96,02	32,14	....	....	32,14	33,88	30,00	....	63,88
257	Introduction of additional courses at the Industrial Schools, at Bijapur and Hubli and at the V. A. Technical Institute, Bombay	5,51	....	....	5,51	....	....	....	....	5,51	....	....	5,51
258	Expansion of the existing Technical Schools and opening of new Technical High Schools	15,13·5	29,36·5	....	44,50	14,83	....	....	14,83	30·5	29,36·5	....	29,67
259	Starting of Model Clubs etc. ..	18	....	....	18	....	....	....	....	18	....	....	18

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*Exclusive of the contribution of the Railways, viz., Rs. 1·95 crores and of the State Transport Corporation, viz., Rs. 3 crores.
**Exclusive of the cost of dredger to be received from the Government of India.

HEAD OF DEVELOPMENT : *Education*—contd.

(Rs. in thousands)

Serial No.	Name of the scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
260	Advance of loans at cheap rate of interest to Secondary Technical Institutions, etc.	....	....	10,00	10,00	....	....	....	....	....	....	10,00	10,00
261	Loan Scholarships to poor and deserving Students studying in Engineering Colleges in the State	40·5	....	52·5	93	....	....	....	....	40·5	....	52·5	93
262	Scheme for training of instructors at the Government of India Training Centre at Kon :-Bilaspur	60	....	....	60	....	....	....	....	60	....	....	60
263	Starting of part time technical courses in selected centres in Bombay State	16,00	9,00	....	25,00	8,33	....	....	8,33	7,67	9,00	....	16,67
264	Establishment of a Department of Printing Technology	4,00	5,00	....	9,00	....	....	....	....	4,00	5,00	....	9,00
265	Expansion of the Vocational Guidance Bureau	2,00	....	....	2,00	1,00	....	....	1,00	1,00	....	....	1,00
266	Establishment of a full-fledged Directorate of Arts	71	....	....	71	....	....	...	...	71	....	....	71
267	Expansion of Art Education and Development of the Department of Drawing and Painting Teacher Training, Arts and Crafts, Sculpture and Modelling and Establishment of a Department in Museum Methods at the Sir J. J. School of Art	2,75	....	....	2,75	....	....	....	....	2,75	....	....	2,75
268	Establishment of a Department of Music, Dance and Drama	1,04	....	....	1,04	....	....	....	....	1,04	....	....	1,04
269	Introduction of two year courses in Town Planning	31	....	....	31	....	....	....	....	31	....	....	31
270	Provision of Additional amenities at the Sir J. J. School of Art	95	....	....	95	....	....	....	....	95	....	....	95
271	Establishment of Fisheries Schools, etc.	3,34	....	....	3,34	....	....	....	....	3,34	....	....	3,34

	University—General Arts and Science												
272	University Education Provision of essential amenities at Government Colleges.	....	32,00	....	32,00	....	....	....	....	....	32,00	....	32,00
273	Grants to Universities ..	90,00	....	....	90,00	45,86	....	....	45,86	44,14	....	....	44,14
274	Increased grant in aid to non-Government Colleges.	10,00	....	....	10,00	....	....	....	....	10,00	....	....	10,00
275	Expansion of facilities for post graduate education and research in basic sciences at the Institute of Science, Bombay.	4,00	....	....	4,00	144·7	....	....	144·7	255·3	....	....	255·3
276	Loan Scholarships for all branches of higher education.	....	....	25,00	25,00	....	....	....	....	....	....	25,00	25,00
	Higher Professional and Technological Institutions												
277	Introduction of additional courses at the R. C. Technical Institute, Ahmedabad	3,21	....	....	3,21	....	....	....	....	3,21	....	....	3,21
278	Expansion of the College of Engineering, Poona	3,72	5,25	....	8,97	1,67	2,26	....	3,93	2,05	2,99	....	5,04
279	Expansion of the L. D. College of Engineering, Ahmedabad	15,16	3,33	....	18,49	6,16	....	....	6,16	9,00	3,33	....	12,33
280	Grants to Private Engineering Colleges in Bombay State	6,00	....	....	6,00	2,00	....	....	2,00	4,00	....	....	4,00
281	Expansion of Dr. S. S. Ghandy School of Engineering	8,14	5,00	....	13,14	....	....	....	....	8,14	5,00	....	13,14
282	Establishment of a Central Technical Library etc. at the V.J.T.I., Bombay	1,50	....	....	1,50	50	....	....	50	1,00	....	....	1,00
283	Facilities for research at the V.J.T.I., Bombay	1,00	....	....	1,00	75	....	....	75	25	....	....	25
	Physical Education												
284	Organisation of one year's certificate course in physical education	1,60	....	....	1,60	....	....	....	....	1,60	....	....	1,60
285	Expansion of the N.C.C. Senior Division and Auxiliary Cadet Corps	20,00	....	....	20,00	....	....	....	....	20,00	....	....	20,00
286	Scouting	20	....	....	20	....	....	....	....	20	....	....	20

HEAD OF DEVELOPMENT : *Education—concld.*

(Rs. in thousands).

Serial No.	Name of the scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Administrative Staff and Training.												
287	Periodical Refresher course and Camp-cum-seminars for gazetted Officers in the Administrative Branch.	20	....	....	20	....	....	....	....	20	....	....	20
288	In-Service training in Educational Administration for the direct recruits to the Bombay Educational Service Class I. (Administrative Branch).	64	....	....	64	....	....	....	....	64	....	....	64
289	Training of administrative personnel (non-gazetted).	4,61	....	....	4,61	....	....	....	....	4,61	....	....	4,61
290	Strengthening of administrative staff of the Directorate of Education.	15,00	....	....	15,00	....	....	....	....	15,00	....	....	15,00
	Total : Education ..	784,75	118,94·5	270,52·5	11,74,22	21,55,2·7	2,26	....	217,78·7	569,22·3	116,68·5	270,52·5	9,56,43·3

HEAD OF DEVELOPMENT : *Health*

Serial No.	Name of the scheme	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
	Hospitals, Dispensaries and Health Units												
291	New layout and re-construction of the J. J. Hospital	....	1,00,00	....	1,00,00	....	....	....	....	....	1,00,00	....	1,00,00
292	Provision of X-Ray Plants at Civil Hospitals	1,48	....	....	1,48	....	....	....	....	1,48	....	....	1,48
293	Provision of ambulance service to District Headquarters Hospitals	2,34	....	....	2,34	....	....	....	....	2,34	....	....	2,34
294	Expansion of accommodation of Leprosy Patients, in certain Leprosy Hospitals in Bombay State	5,00	51,00	....	56,00	....	....	....	....	5,00	51,00	....	56,00
295	Providing proper drainage etc., facilities at Civil Hospitals	10,00	10 00	....	20,00	....	....	....	....	10,00	10,00	....	20,00
296	Establishment of Cottage Hospitals ..	6,00	59,48	....	65,48	....	....	....	....	6,00	59,48	....	65,84

297	Expansion and construction of new Mental Hospitals	1,00	76,00	....	77,00	....	....	....	....	1,00	76,00	....	77,00
298	Expansion of certain Civil Hospitals ..	7,00	34,00	....	41,00	....	....	....	....	7,00	34,00	....	41,00
299	Increase in the number of beds in District Headquarters Hospitals, etc.	10,00	....	....	10,00	....	....	....	....	10,00	....	....	10,00
300	Reorganisation of District Health Scheme	2,71	....	....	2,71	....	....	....	....	2,71	....	....	2,71
301	Provision of three more health units ..	12,00	6,00	....	18,00	5,20	....	....	5,20	6,80	6,00	....	12,80
302	Opening of one more mobile Hospital Unit	1,55	....	....	1,55	....	....	....	....	1,55	....	....	1,55
303	Establishment of Primary Health Units	60,00	....	....	60,00	20,20	....	....	20,20	39,80	....	....	39,80
304	Appointment of trained pharmaceutists at the Government Hospitals and Dispensaries	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50
305	Gradual conversions of Bombay Medical Service Class III posts into Class II posts	5,28	....	....	5,28	....	....	....	....	5,28	....	....	5,28
306	Provision of additional staff, equipment alterations, etc., to existing Medical Institutions	1,00,00	....	....	1,00,00	....	....	....	....	1,00,00	....	....	1,00,00
307	Grants to private hospitals and dispensaries	24,00	....	....	24,00	....	....	....	....	24,00	....	....	24,00
	Water Supply												
308	Government Water Supply Schemes—												
	(i) Completion of schemes started under the First Five-Year Plan	....	1,24,00	....	1,24,00	....	....	....	....	....	1,24,00	....	1,24,00
	(ii) New works	....	50,00	....	50,00	....	....	....	....	....	50,00	....	50,00
309	Rural water supply	1,17,00	....	....	1,17,00	58,50	....	....	58,50	58,50	....	....	58,50
310	Municipal Water Supply Schemes—												
	(i) Works in progress	76,00	....	1,88,00	2,64,00	....	....	1,88,00	1,88,00	76,00	....	....	76,00
	(ii) New works	30,00	....	52,00	82,00	....	....	52,00	52,00	30,00	....	....	30,00
311	Khadakwasla Water Supply Scheme ..	....	75,00	75,00	1,50,00	....	....	....	....	....	75,00	75,00	1,50,00
312	Rakaskop Project for water supply to Belgaum.	....	1,00,00	....	1,00,00	....	....	....	....	....	1,00,00	....	1,00,00
313	Vaitarna-cum-Tansa-Scheme ..	....	....	2,50,00	2,50,00	....	....	2,50,00	2,50,00	....	....	....	....
314	Village Water Supply	1,20,00	....	....	1,20,00	....	....	....	....	1,20,00	....	....	1,20,00

HEAD OF DEVELOPMENT: *Health*—contd.

(Rupees in thousands)

Serial No.	Name of scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue.	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Drainage and Sanitation												
315	Subsidising construction of modern sanitary conveniences	4,00	....	....	4,00	2,40	....	....	2,40	1,60	....	....	1,60
316	Grant of loans for construction of Slaughter Houses	....	....	5,00	5,00	....	....	....	....	....	....	5,00	5,00
	Control of Diseases												
317	Control of T. B. by mass miniature Radiography, etc	3,46	....	....	3,46	....	....	....	....	3,46	....	....	3,46
318	Control of Tuberculosis ..	20,00	20,00	....	40,00	5,95	....	....	5,95	14,05	20,00	....	34,05
319	Continuance of B. C. G. Vaccination Scheme ..	20,00	....	....	20,00	....	....	....	....	20,00	....	....	20,00
320	Establishment of Leprosy Control Centres	24,00	....	....	24,00	12,00	....	....	12,00	12,00	....	....	12,00
321	Anti-Malaria Scheme	2,20,00	....	....	2,20,00	1,02,00	....	....	1,02,00	1,18,00	....	....	1,18,00
322	Control of Filariasis	3,00	....	....	3,00	3,00	....	....	3,00	....	....	....	....
323	Plague Organisation	1,79	....	....	1,79	....	....	....	....	1,79	....	....	1,79
	Laboratory Service												
324	Establishment of Health Laboratories, etc.	2,00	....	....	2,00	....	....	....	....	2,00	....	....	2,00
	Medical Education and Training												
325	Establishment of Medical College and Hospital at Hubli	....	50,00	....	50,00	....	....	....	......	....	50,00	....	50,00
326	Conversion of Honorary posts of doctors and teachers in Government Medical Colleges and Hospitals attached thereto into full time doctors and teachers	10,00	....	....	10,00	....	....	....	....	10,00	....	....	10,00
327	Starting refresher courses in certain specialities	44	....	....	44	....	....	....	....	44	....	....	44

328	Facilities for imparting post-examination training for Medical students, etc.	29,40	....	....	29,40	....	....	....	....	29,40	....	....	29,40
329	Establishment of a College of Nursing, etc.	2,00	....	....	2,00	....	...	....	....	2,00	....	....	2,00
330	Training and employment of additional X-Ray and Laboratory technicians	1,00	....	....	1,00	....	....	....	....	1,00	....	....	1,00
331	Appointment and training of additional Nurses, Midwives and Health visitors	5,00	....	....	5,00	....	....	....	....	5,00	....	....	5,00
332	Upgrading of Departments in Medical Colleges and Hospitals and for Medical Research	5,00	....	....	5,00	2,50	....	....	2,50	2,50	....	....	2,50
333	Institution of Training School in Pharmacy	3,00	....	....	3,00	....	....	....	....	3,00	....	....	3,00
334	Completion of buildings of the Medical Colleges and Hospitals at Poona and Ahmedabad	....	50,00	....	50,00	....	....	....	....	....	50,00	....	50,00
335	Training of Personnel in Public Health	50	....	....	50	....	....	....	....	50	....	....	50
336	Expansion of activities for Health Education	2,00	....	....	2,00	....	....	....	....	2,00	....	....	2,00
	Systems other than Modern Medicines												
337	Research in Ayurveda	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50
338	Pharmacy storage of Ayurvedic herbs	50	....	....	50	....	....	....	....	50	....	....	50
339	Starting an Ayurvedic Museum ..	1,00	....	....	1,00	....	....	....	....	1,00	....	....	1,00
340	Preparation of books, etc. on Ayurveda	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50
341	Grant-in-aid to Ayurveda Teaching Institutions	5,00	....	....	5,00	....	....	....	....	5,00	....	....	5,00
	Miscellaneous												
342	Reorganisation of the Directorate of Public Health	....	4,00	....	4,00	....	....	....	....	....	4,00	....	4,00
343	Preparation of layouts for Re-siting and Extension of villages	1,00	....	....	1,00	....	....	....	....	1,00	....	....	1,00
344	Grant-in-aid to local bodies for Public Health purposes	24,00	....	....	24,00	....	....	....	....	24,00	....	....	24,00
	Total: Health ..	9,83,95	8,09,48	5,70,00	23,63,43	2,11,75	....	4,90,00	7,01,75	7,72,20	8,09,48	80,00	16,61,68

HEAD OF DEVELOPMENT : *Housing*

(Rupees in thousands)

Serial No.	Name of scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Industrial Housing												
345	*Housing for industrial workers ..	11,62	50,00	6,88,38	7,50,00	11,62	3,32,58	3,55,80	7,00,00	....	50,00	....	50,00
	Slum Clearance												
	Urban Land Development												
346	Preparation of Development Plans of Towns	11,25	....	....	11,25	....	....	....	....	11,25	....	....	11,25
	Special Housing Scheme												
347	Housing of Gazetted Government Officers in Bombay City	....	1,00,00	....	1,00,00	....	....	....	....	....	1,00,00	....	1,00,00
348	Housing of Class III and Class IV employees of the State Government	....	2,00,00	....	2,00,00	....	....	....	....	....	2,00,00	....	2,00,00
349	†Low Income Group Housing ..	1,75	....	3,48,25	3,50,00	....	....	3,48,25	3,48,25	1,75	....	....	1,75
350	Contribution towards the share capital of the Bombay Co-operative Housing Finance Society	....	16,00	....	16,00	....	....	....	....	....	16,00	....	16,00
	Miscellaneous												
351	Administrative Buildings	....	1,50,00	....	1,50,00	....	....	....	....	....	1,50,00	....	1,50,00
	Total: Housing ..	24,62	5,16,00	10,36,63	1,57,725	11,62	3,32,58	7,04,05	10,48,25	13,00	5,16,00	....	5,29,00

HEAD OF DEVELOPMENT : *Other Social Services*

	Labour Welfare												
352	Expansion of the Employees' State Insurance Scheme	57,50	....	....	57,50	....	....	....	....	57,50	....	....	57,50
353	Supervision over the Administration of the Bombay Shops and Establishments Act, etc.	1,87	....	....	1,87	....	....	....	....	1,87	....	....	1,87
354	Socio-Economic Surveys, etc. ..	6,89	....	....	6,89	....	....	....	....	6,89	....	....	6,89
355	Research into industrial diseases and hazardous occupations	1,40	....	....	1,40	....	....	....	....	1,40	....	....	1,40
356	Decasualisation Scheme for Textile Workers	3,76	....	....	3,76	....	....	....	....	3,76	....	....	3,76
357	Reorganisation of the Institute for Training of Labour Welfare Workers, Bombay	59	....	....	59	....	....	....	....	59	....	....	59
358	Schemes proposed by the Labour Welfare Board— (i) Opening of additional "C" Type Centres (ii) Construction of enclosures and provision of seating arrangements at "A" type centres, etc. (iii) Starting new creches in Bombay State (iv) Opening of additional Nursery schools (v) Promotion of workers education. (vi) Grants-in-aid to Libraries .. (vii) Starting of holiday homes ..	These schemes will be financed from the Labour Welfare Fund and will not involve any cost to Government.											
359	Evening Classes for industrial workers ..	2,39	....	....	2,39	....	....	....	....	2,39	....	....	2,39
360	Technical and Vocational Training Schemes	12,00	8,00	....	20,00	....	....	....	....	12,00	8,00	....	20,00
361	Apprenticeship training of craftsmen ..	10,00	....	....	10,00	....	....	....	....	10,00	....	....	10,00
362	Expansion of the Employment Service	1,74	....	....	1,74	....	....	....	....	1,74	....	....	1,74
363	Collection of Employment market information	1,40	....	....	1,40	....	....	....	....	1,40	....	....	1,40
364	Occupational Testing at Exchanges ..	27	....	....	27	....	....	....	....	27	....	....	27
365	Appointment of a Non-official council for Industrial Health, Hygiene and safety.	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50

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*Includes provision of Rs. 23·22 lakhs on account of loans to Co-operative Housing Societies of industrial workers.
†Includes provision of Rs. 35·56 lakhs on account of loans to Backward Class Societies.

HEAD OF DEVELOPMENT : *Other Social Services*—contd.

(Rs. in thousands)

Serial No.	Name of the Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Welfare of Scheduled Tribes												
366	Special measures for Vimukta Jatis and Scheduled Tribes	7,71·5	....	....	7,71·5	4,81·5	....	....	4,81·5	2,90	....	....	2,90
367	Development of Scheduled Areas and underdeveloped areas	23,55	....	....	23,55	23,55	....	....	23,55	....	....	....	....
368	Financial assistance to Industrial Co-operative Societies from Scheduled Areas	82·8	50	....	1,32·8	62	38	....	1,00	20·8	12	..	32·8
	Welfare of Scheduled and Backward Classes												
369	Grant of loans and subsidies to Backward Classes trained artisans	50	....	1,50	2,00	9	..	....	9	47·8	..	1,43·2	1,91
370	Grants to Voluntary agencies for welfare work among Backward Classes in merged States territories.	10,0	....	..	1,00	25	..	....	25	75	..	..	75
371	Measures for the eradication of untouchability	29,59	....	..	29,59	29,59	..	....	29,59	..	..	..	
372	Grant of financial assistance to Co-operative Housing Societies of Backward Classes, etc.	24,34	....	..	24,34	20,12	..	....	20,12	4,22	..	..	4,22
373	Provision of medical and public health facilities to Scheduled areas	11,14	....	..	11,14	5,57	..	....	5,57	5,57	..	..	5,57
374	Grant of facilities to Backward Class agriculturists	34,00	....	..	34,00	11,02	..	....	11,02	22,98	..	..	22,98
375	Expansion of facilities for primary education	53,70	....	..	53,70	32,97·5	..	....	32,97·5	2072·5	..	..	20,72·5
376	Secondary education for Backward Class people	10,00	....	..	10,00	30	..	....	30	9,70	..	..	9,70
377	Facilities to Backward Class Students attending Colleges (University Education)	10,00	....	..	10,00	8,50	..	....	8,50	1,50	..	..	1,50

378 Miscellaneous educational facilities to Backward Class pupils	15,96·5	....	..	15,96·5	2,12·5	..	....	2,12·5	18,84	..	..	18,84
379 Special Schemes for the uplift of Nomadic and Semi-Nomadic Tribes.												
(a) Administration												
(b) Education—												
(i) Grants to hostels for admitting nomadic pupils												
(ii) Free supply of clothes, books and slates												
(iii) Scholarships												
(iv) Six Ashram Schools :												
(c) Economic uplift—												
(i) Training-cum-production centres												
(ii) Financial Assistance to trainees												
(iii) Encouragement of hawking business.												
(iv) Financial assistance to heriditary artisans	67,34	....	17,81	85,15	6,50	--	....	6,50	60,84	..	17,81	78,65
(v) Encouragement to Poultry keeping and goat farming												
(vi) Supply of milch cattle ..												
(vii) Financial assistance to nomadic tribe agriculturists												
(d) Housing Schemes												
(e) Grants to voluntary agencies for uplift work												
(f) Wells												
(g) Ameliorative measures for women												
(h) Miscellaneous (training camps, cultural survey, publicity, etc.)												
380 Financial assistance to Forest Labourers' Co-operative Societies	12,18	....	..	12,18	12,18	..	....	12,18	..	..	..	..
381 Scheme for organisation of Industrial Training Centres for Vimukta Jatis	1,50·3	....	..	1,50·3	1,50·3	..	....	1,50·3	..	..	..	..
382 Scheme for organisation of additional tailoring Schools for Backward Classes	72	....	..	72	14	..	....	14	58	..	..	58

* Provision for loan assistance of Rs. 35·66 lakhs is included under "Housing".

HEAD OF DEVELOPMENT : *Other Social Services*—contd.

(Rs. in thousands)

Serial No.	Name of scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Social Welfare Extension Projects												
383	Scheme for implementation of Welfare Extension Projects	15,00	....	..	15,00	..	..	....	....	15,00	..	..	15,00
	Women's and Children's Welfare												
384	Expansion of work under the Bombay Probation of Offenders' Act, 1933	4,00	....	..	4,00	..	..	....	....	4,00	..	..	4,00
385	Services for welfare of women above the age of 21	1,20	....	..	1,20	..	..	....	....	1,20	..	..	1,20
421	Social and Moral Hygiene and After-Care Services	24,80	....	..	24,80	..	..	....	....	24,80	..	..	24,80
386	Opening of Government Certified Schools etc.	4,78	7,50	..	12,28	..	....	....	..	4,78	7,50	..	12,28
387	Opening of additional Remand Homes	3,30	....	..	3,80	..	..	....	....	3.30	..	..	3,30
388	Reorganisation of the Juvenile Department	2,02	.....	..	2,02	..	..	....	....	2,02	..	.	2,02
389	Establishment of experimental pilot Classification Centres	2,96	.....	..	2,96	..	..	....	....	2,96	..	..	2,96
390	Opening of after-care hostels with workshop and Rehabilitation Bureau	90	7,00	..	7,90	..	..	....	....	90	7,00	..	7,90
391	Opening of Juvenile Guidance Centres..	80	....	..	80	..	..	....	....	30	..	..	80
392	Award of scholarships for research work .. into the problems of Juvenile delinquency	14	....	..	14	..	..	....	....	14	..	..	14
	Youth Welfare												
393	Youth Service Camps	14,00	....	..	14,00	14,00	..	....	14,00	..	..	..	..

	Welfare of the Physically Handicapped												
394	Administrative staff for implementation of the Schemes of Education of Handicapped	60	....	..	60	..	..	....	....	60	..	..	60
395	General measures for the improvement of education of the Handicapped	5,00	....	..	5,00	2,50	..	....	2,50	2,50	..	..	2,50
396	Development of existing schools of the handicapped												
397	Opening of new schools for the handicapped												
398	Sheltered workshops for the physically handicapped	4,00	....	..	4,00	..	..	....	....	4,00	..	..	4,00
	Other Welfare Programmes												
399	Development of Ghayapatwadi and Visapurlands for rehabilitation of beggars	2,00	....	..	2,00	..	..	....	....	2,00	..	..	2,00
	Total : Other Social Services ..	4,90,88·1	23,00	19,31	5,33,19·1	1,76,34·8	38	....	1,76,72·8	3,14,60·1	22,62	19,24·2	3,56,46·3

HEAD OF DEVELOPMENT : *Scientific and Industrial Research, Languages, Literature, Arts and Culture, all other Activities.*

	Development of National and Regional Languages												
400	Expansion of the Departments of the Deccan College Post Graduate and Research Institute, Poona.	3,00	....	....	3,00	1,62	....	....	1,62	1,38	....	....	1,38
401	Schemes for the propagation of Hindi in Bombay State	2,50	....	....	2,50	1,65	....	....	1,65	85	....	....	85
402	Department for the Dictionary of Sanskrit on historical principles	2,10	....	....	2,10	2,10	....	....	2,10	....	....	....	....

HEAD OF DEVELOPMENT : *Scientific and Industrial Research, Languages, Literature, Arts and Culture, all other Activities*—contd.

(Rs. in thousands)

Serial No.	Name of the Scheme	Five Year Cost				Central Assistance				Cost to State Government			
		Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Encouragement of Arts and Culture												
403	Building, Equipment and Maintenance grants to Research and Cultural Institutions	4,00	....	....	4,00	....	....	....	....	4,00	....	....	4,00
404	Creation of a Department of Archaeology	80	....	....	80	....	....	....	....	80	....	....	80
	Publicity and Propaganda												
405	Expansion of Rural Broadcasting Scheme	11,00	....	....	11,00	6,49	....	....	6,49	4,51	....	....	4,51
406	Feature Publicity	70	....	....	70	....	....	....	....	70	....	....	70
407	Printed and pictorial publicity ..	6,57·5	....	....	6,57·5	....	....	....	....	6,57·5	....	....	6,57·5
408	Information Centres	5,27·5	....	....	5,27·5	....	....	....	....	5,27·5	....	....	5,27·5
409	Programme of Exhibitions ..	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50
410	Tours of Journalists	70	....	....	70	....	....	....	....	70	....	....	70
411	Films publicity	1,25	....	....	1,25	....	....	....	....	1,25	....	....	1,25
412	Publicity through Recreational activities	1,50	....	....	1,50	....	....	....	....	1,50	....	....	1,50
413	Establishment of workshop for repairs to Projectors, Generators, etc.	1,00	....	....	1,00	....	....	....	....	1,00	....	....	1,00
414	Publicity through Mobile Publicity Vans	7,50	....	....	7,50	....	....	....	....	7,50	....	....	7,50
415	Mofussil Correspondents	50	....	....	50	....	....	....	....	50	....	....	50

99. *Miscellaneous.*

416	Statistics relating to planning—Planning Unit	2,00	....	....	2,00	1,00	....	....	1,00	1,00	....	....	1,00
417	District Statistical Organisation ..	4,00	....	....	4,00	2,00	....	....	2,00	2,00	....	....	2,00
418	Revision of Bombay District Gazetteers.	3,44	....	....	3,44	1,72	....	....	1,72	1,72	....	....	1,72
419	Miscellaneous schemes received from District Development Boards.	100,00	....	....	100,00	....	....	....	....	100,00	....	....	100,00
420	Development Schemes proposed by Municipal Corporations, Borough and District Municipalities	225,00	....	456,75	681,75	....	....	....	....	225,00	....	456,75	681,75
*421	Social and Moral Hygiene and After-care Services.	....	....	....	....	....	....	....	....	....	....	....	....
	Total; Scientific and Industrial Research, etc.	384,34	....	456,75	841,09	16,58	....	....	16,58	367,76	....	456,75	824,51

*Note.—Scheme No. 421 has been shown after scheme No. 385 and before scheme No. 386.

ITEMS OF DEVELOPMENT [illegible]

Name of Scheme	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total	Revenue	Capital	Loan	Total
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PART II

PROJECTS IN THE STATE PLAN

AGRICULTURE AND COMMUNITY DEVELOPMENT

(AGRICULTURAL PRODUCTION)

SCHEME No. 1.

Name of the Scheme.—**Additional staff in the Department of Agriculture.**

Recurring	... Rs.	12,80,000	Non-recurring	... Rs.	20,000
Total	... ,,	13,00,000	Ultimate annual recurring	,,	2,56,000

Remarks.—Owing to cosiderable increase in the work and activities of the Agricultural Department, the Director of Agriculture is overworked at present and finds very little time to attend to policy matters, inspection of district work and other important activities of the Department. To enable the Director of Agriculture to devote more attention to matters of policy, organisation, administration and other important items of work, it is essential to create a post of Joint Director of Agriculture (in the scale of Rs. 1,300—60—1,600), to give adequate relief to the Director. There is at present one post of Joint Director of Agriculture (in the scale of Rs. 1,300—60—1,600) but this officer has mainly to deal with the large Soil Conservation Programme of the Department. The two Joint Directors of Agriculture, one already sanctioned and the other now proposed, will share with the Director all the work of this Department including that of Soil Conservation. It is also proposed to provide one Senior experienced Officer in B. A. S., Class II (Rs. 220—650) to assist the proposed Joint Director in technical matters, to be designated "Technical Assistant (Agriculture)".

Similarly in view of the considerable increase in the work of the administrative and financial side of the Department, it is proposed that a post of Personal Officer in the scale of Rs. 650—50—950 in the General State Service be created in lieu of the present post of Establishment Officer in the General State Service, Class II. An additional post of Accounts Officer in B. A. S., Class II (Rs. 220—650) is also proposed to be created to assist the present Accounts Officer in B. A. S., Class I in the complex and voluminous nature of accounts work of the Department; the latter officer will be designated as Chief Accounts Officer, Department of Agriculture. It is also necessary to augment the existing branches adequately and to form additional branches to cope with the increased load of clerical work as a result of the new schemes to be launched under the Second Five-Year Plan and necessary provision on this account has been included in this scheme. It is also proposed to increase the number of Regional Deputy Directors of Agriculture to bring about closer supervision of district work. The acreage under oilseeds in the State is very large and it is necessary that a separate Officer deals with problems of research and development pertaining to oilseeds, as is the case of sugarcane, cotton, etc.

A total provision of Rs. 13 lakhs has been included in the Plan for this scheme of which Rs. 12,80,000 will be recurring and Rs. 20,000 non-recurring expenditure.

SCHEME No. 2.

Name of the Scheme.—**Training of staff of the Department of Agriculture.**

Recurring	... Rs.	1,10,000	Non-recurring	... Rs.	*Nil.*
Total	... ,,	1,10,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—Under this scheme it is proposed to give higher specialised training to the technical staff with a view to increasing their usefulness to the Agricultural Department.

(*i*) Training of the primary reporting agency in the methods of collection and compilation of agricultural statistics.

(*ii*) Deputation of officers in charge of research stations for specialised training in India. There are at present forty-five Agricultural Research Stations where plant breeding and agronomic work is in progress. It is desirable to give to the research workers working therein higher training in specialised subjects at recognised institutions.

SCHEME No. 3.

Name of the Scheme.—**Expansion of Training in Extension Work.**

Recurring	... Rs.	11,73,000	Non-recurring	... Rs.	6,05,000
Total	... ,,	17,78,000	Ultimate annual recurring	,,	2,34,000

Remarks.—At present there are three Extension Training Centres, viz., (*i*) at Anand for Gujarat, (*ii*) at Manjri for Maharashtra and (*iii*) at Dharwar for Karnatak, for training Gram Sevaks, to meet the requirements of the National Extension Service Blocks and Community Development Projects areas. With a view to covering the whole State by National Extension Service Blocks and nearly half the State by Community Development Project areas during the next five years, it is proposed to train Gram Sevaks at a faster rate. Two additional Extension Training Centres, viz., one at Baroda and the other at Kolhapur, are proposed to be started. It is also proposed to expand the existing centre at Dharwar to meet the requirements of the Karnatak area.

SCHEME No. 4.

Name of the Scheme.—**Expansion of Agricultural Schools.**

Recurring	... Rs.	13,00,000	Non-recurring	... Rs.	26,85,000
Total	... ,,	39,85,000	Ultimate annual recurring	,,	3,60,000

Remarks.—At present there are 17 agricultural schools in the State, 15 run departmentally and 2 by private organisations with a grant-in-aid from Government. It is proposed to open four new Agricultural Schools in four out of the remaining ten districts of the State where there are no Agricultural Schools at present. The objective is to make the existing as well as the new Agricultural

Schools self-supporting and for this purpose it is necessary to increase the area of the schools or to create further facilities such as irrigation, available to the existing schools, at an estimated cost of Rs. 5 lakhs. It is proposed to pay grant-in-aid of Rs. 3·85 lakhs to the two private Agricultural Schools, viz., at Anand and Malegaon, during the course of the Second Five-Year Plan. The cost of opening four additional schools is estimated to be Rs. 31 lakhs.

SCHEME No. 5.

Name of the Scheme.—**Buildings for the College of Agriculture, Poona.**

Recurring ... Rs.	*Nil.*	Non-recurring ... Rs.	10,00,000
Total ... ,,	10,00,000	Ultimate annual recurring ,,	*Nil.*

Remarks.—From the point of view of efficiency it is necessary that the staff of the Agricultural College resides on the College estate. It is, therefore, proposed to construct residential quarters for the staff at the College of Agriculture, Poona. A hostel block for students and a gas plant are also proposed to be constructed. Certain existing buildings at the College are proposed to be remodelled with a view to facilitating teaching and research work. The total cost of the additional buildings to be provided is estimated to be Rs. 10 lakhs.

SCHEME No. 6.

Name of the Scheme.—**General Research Schemes.**

Recurring ... Rs.	50,84,000	Non-recurring ... Rs.	8,25,000
Total ... ,,	59,09,000	Ultimate annual recurring. ,,	*Nil.*

Remarks.—It is proposed under this scheme to provide for research principally regarding plant breeding work on cereals, pulses and millets and investigations on diseases and pests of these crops. It is estimted that certain existing schemes which are in progress and which have to continue will cost about Rs. 27 lakhs during the Second Plan period. It is also proposed to undertake research on new problems at an estimated cost of about Rs. 32 lakhs.

SCHEME No. 7.

Name of the Scheme.—**Intensification of production and distribution of improved seeds.**

Recurring ... Rs.	14,80,000	Non-recurring ... Rs.	54,00,000
Total ... ,,	68,80,000	Ultimate annual recurring. ,,	2,50,000

Remarks.—Under this Scheme, it is proposed to have the following activities during the Second Five-Year Plan period :—

(a) *Production of nucleus seeds of improved strains of important food crops.*—The production of nucleus seeds forms the backbone of the work of multiplication and distribution of improved seeds. With plant breeding research in progress at various research stations in the State, new strains are evolved as well as old strains are improved upon by hybridisation. For introducing new strains or to replace the old strains, nucleus seed production has to go hand in hand with the advance in research work. It is also proposed to increase the facilities for production of nucleus seed at the existing research stations and other Government farms.

(b) *Multiplication and distribution of hybrid Bajri.*—The object of the scheme is to exploit hybrid vigour in crosses between different types in Bajri for increased crop production. As a result of past research in this direction, a hybrid strain has been selected for covering the Bajri area of Nasik District.

(c) *New seed farms for multiplication of improved seed.*—It is necessary to have one farm of about 25 acres in each taluka. The nucleus seed supplied by the research farms of the Department will be further multiplied on these farms for distribution to cultivators. A seed store will be attached to each farm. It is proposed to open 115 farms in 115 talukas at an estimated cost of Rs. 55,00,000 spread over a period of 5 years.

SCHEME No. 8.

Name of the Scheme.—**Development of manures and fertilisers.**

Recurring	...	Rs.	90,000	Non-recurring	... Rs.	*Nil.*
Total	...	,,	90,000	Ultimate annual recurring.	,,	18,000

Remarks.—The object of the scheme is to popularise the use of manures and fertilisers by cultivators for increasing production of crops. It also includes the work of inducing municipalities and village panchayats to prepare compost on scientific lines, so as to increase the manurial value of the organic matter composted. The present capacity of the State for preparation of compost from urban wastes is estimated at 6 lakh tons per year whereas the quantity at present produced is about 2·6 lakh tons per annum. The production has, therefore, to be stepped up to the maximum capacity of 6 lakh tons annually. Under the scheme it is proposed to reach the target of production of 6 lakh tons annually by the end of the Second Five-Year Plan.

SCHEME No. 9.

Name of the Scheme.—**Crop Protection.**

Recurring	...	Rs.	6,65,000	Non-recurring	... Rs.	*Nil.*
Total	...	,,	6,65,000	Ultimate annual recurring.	,,	2,73,000

Remarks.—It is proposed to expand the existing crop protection service for controlling the ravages of pests and diseases of crops and to save the important food and non-food crops from destruction.

New methods of pest and disease control, with special reference to locust control work, will be made known to the cultivators by demonstration and propaganda.

SCHEME No. 10.

Name of the Scheme.—**Research and Development of Horticulture.**

Recurring ... Rs. 12,99,000 Non-recurring ... Rs. 1,85,000

Total ... „ 14,84,000 Ultimate annual recurring „ *Nil*

Remarks —It is proposed to carry out research on the important horticultural and vegetable crops and to find out suitable remedial measures for the control of pests and diseases affecting these crops. It is also propsed to bring under fruit cultivation additional area, especially sloppy and fallow area which cannot grow field crops. Increasing the present area under coconuts and investigating problems regarding their cultivation will also be undertaken. Coconut seedlings of good varieties from the existing nurseries at Kumta and Nandgaon will be supplied to cultivators.

SCHEME No. 11.

Name of the Scheme.—**Research and Development of Sugarcane.**

Recurring ... Rs. 67,75,000 Non-recurring ... Rs. *Nil.*

Total ... „ 67,75,000 Ultimate annual recurring ... „ *Nil*

Remarks.—Agronomic research work on sugarcane and work on sugarcane pests and diseases is already being carried out. It is proposed to continue this work during the Second Plan period and to carry the results of research work to the cultivators and thus increase the production of sugarcane. For this purpose new sub-stations for research would be opened at suitable places.

SCHEME No. 12.

Name of the Scheme.—**Research and Development of Cotton.**

Recurring ... Rs. 30,00,000 Non-recurring ... Rs. *Nil*

Total ... „ 30,00,000 Ultimate annual recurring „ *Nil*

Remarks.—The introduction of improved varieties of cotton in the respective cotton tracts has resulted in increased production of cotton and bringing more land under cotton cultivation. It is proposed to continue the following items of work in the Second Five Year Plan :—

(1) Research Work on evolving better quality cottons.

(2) Extension of improved varieties of cotton.

(3) Establishment of Check Nakas to regulate movement of cotton into controlled areas.

(1) The object of the cotton research schemes is to evolve improved varieties of cotton best suited to the respective tracts.

(2) The cotton extension work consists of distribution and multiplication of improved varieties of cotton in different stages in the respective tracts and of spreading improved varieties. The cotton extension schemes are run on progressive self-sufficiency basis. They will be entirely self-sufficient from the year 1956-57. The expenditure will be initially borne by Government. The improved varieties of cotton will give more monetary return to the cotton cultivators and will naturally give an incentive to the cultivators for growoing these varieties.

(3) Cotton Check Stations are established so as to check the illicit import of non-descript cotton varieties into the respective protected areas.

(4) A scheme for expansion of the area under superior long staple Indo-American Cotton will also be undertaken.

SCHEME No. 13.

Name of the Scheme.—**Research and Development of Oilseeds.**

Recurring	... Rs.	5,05,000	Non-recurring	... Rs.	*Nil*
Total	... ,,	5,05,000	Ultimate annual recurring.	,,	*Nil*

Remarks.—During the Second Five Year Plan period it is proposed to conduct research on oil seed crops, particularly in the Mehsana and West Khandesh Districts and also to carry out research on diseases and pests of groundnut and sesamum.

Besides the above items, measures for the development of oil seed crops will also be undertaken.

SCHEME No. 14.

Name of the Scheme.—**Mechanical Cultivation.**

Recurring	... Rs.	49,50,000	Non-recurring	... Rs.	*Nil*
Total	... ,,	49,50,000	Ultimate annual recurring.	,,	*Nil*

Remarks.—For undertaking reclamation of waste lands and for levelling lands under paddy cultivation or irrigated farming the scheme for mechanical cultivation is being continued during the Second Five Year Plan period.

With a view to speeding up the work of levelling of lands, more especially in the Community Development Project areas and National Extension Service Blocks, the activities of the Mechanical Cultivation Section will be confined to levelling of lands with the help of bulldozers. 56 bulldozers will be worked in 14 operational units stationed in the various districts.

It is estimated that work for about 2,80,000 hours (equivalent to 56,000 acres) will be carried out by the end of the Second Five Year Plan period.

SCHEME No. 15.

Name of the Scheme.—**Grants-in-aid to Agricultural Associations for extension work and demonstration shows.**

Recurring	... Rs.	2,00,000	Non-recurring	...	Rs.	*Nil*
Total	... ,,	2,00,000	Ultimate annual recurring		,,	40,000

Remarks.—Taluka Development Associations and Boards have proved effective agencies for carrying out extension propaganda regarding improved agricultural methods. Grants-in-aid are given to those Associations and Boards who appoint qualified staff for the propaganda work. These grants-in-aid will be continued to be given.

The Adarsh Seva Sangh, Pohri, is doing good work in respect of agriculture, inasmuch as it has been publishing a monthly magazine on rural activities which has proved very popular. This and similar other bodies will be given grants-in-aid to enable them to continue the work.

Agricultural Demonstrations and Shows :—Cattle breeders from this State are asked to exhibit their cattle in the All India Cattle Show organised by the All India Cattle Show Committee, New Delhi. Grants will be given to such cattle breeders towards the expenses of rail transport of their cattle to Delhi or elsewhere.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(LAND DEVELOPMENT)

SCHEME No. 16.

Name of the Scheme.—**Refresher Courses for Agricultural Officers and Agricultural Assistants and for deputation of Officers for training abroad.**

Recurring	... Rs.	3,00,000	Non-recurring	...	Rs.	*Nil*
Total	... ,,	3,00,000	Ultimate annual recurring.		,,	45,000

Remarks.—Government of Bombay has programmed to carry out contour bunding work over an area of 10 lakh acres during the Second Five Year Plan period. To carry out this programme, additional field staff comprising of Agricultural Officers and Agricultural Assistants is already being recruited and trained in the Social Conservation Training Centres at Sholapur and Baroda. This new as well as the existing staff will need a Refresher Course to keep it well informed with the ever improving methods of Soil Conservation and the latest techniques adopted in it. Knowledge of the staff in respect of the Bombay Land Improvement Schemes Act and the accounting procedure followed in the Soil Conservation Section would also need brushing up. Further as the maintenance work of bunds constructed is to be entrusted to the Extension staff of the Agricultural Department, this staff also will need training. All this is proposed to be imparted at the Soil Conservation Training Institute, Sholapur.

It is also proposed to send two officers for regular training (for about 12 months) in the U.S.A. and/or Australia, and three officers for short term visit of about 3 months in the U.S.A. and/or Australia.

This scheme is eligible for financial assistance from the Government of India to the extent of 50 per cent. of the total cost of the scheme.

SCHEME No. 17.

Name of the Scheme.—**Survey and Research in Soil Conservation.**

Recurring	... Rs. 3,28,000	Non-recurring	... Rs. 1,34,000
Total	... ,, 4,62,000	Ultimate annual recurring.	,, *Nil*

Remarks.—(*i*) *Scheme for Soil Conservation Research.*—At present contour bunding work is being undertaken in shallow and medium soils only. No bunding work is undertaken in deep black soil areas, since a suitable technique for bunding such area has not yet been evolved. As a first step, a scheme for undertaking experiments in a block of 400 acres from the deep black soil areas of the Deccan region has been taken up. It is proposed to carry out research work in another three blocks of 400 acres in each of the remaining three deep black soil regions of the State, viz., (1) Gujarat, (2) Khandesh, and (3) Karnatak. The total cost of the scheme is estimated at Rs. 3,50,000.

(*ii*) *Soils Conservation Survey of the catchment areas of river valley projects.*—It is proposed that a soil conservation survey of the catchment area of the river valley projects in the State, should be undertaken, with a view to collecting data regarding the erosion conditions in the area in the first instance, followed by a reconnaissance survey and survey of vulnerable areas. The total cost is estimated at Rs. 1,12,000.

SCHEME No. 18.

Name of the Scheme.—**Soil Conservation Works.**

Recurring	... Rs. 1,00,00,000	Non-recurring	... Rs. 2,04,00,000
Total	... ,, 3,04,00,000	Ultimate annual recurring	,, *Nil*

Remarks.—(*i*) *Scheme for soil conservation works.*—Contour bunding works were commenced in 1942 and so far about ten lakh acres of shallow and medium soil area has been bunded. It is proposed to undertake bunding work over a total area of 6,95,000 acres during the Second Five Year Plan period. The total cost of bunding an area of 6,75,000 acres has been estimated at Rs. 2,98,00,000. Soil conservation measures will also be undertaken in Community Development Project, Community Development Block and National Extension Service Block areas.

(*ii*) *Levelling and terracing of Hill Slopes.*—At present the activities of the Soil Conservation Section are confined to the medium and light soil areas in the low and uncertain rainfall tract of the State. It is proposed to undertake levelling or terracing work in heavy rainfall areas also, where the problem of soil erosion is severe. The work is proposed to be undertaken in 15 areas on a catchment basis comprising in all about 1,500 acres. The total cost of this work is estimated at Rs. 6,00,000.

(*iii*) *Introduction of Dry Farming Methods.*—It has been experimentally proved that yields of crops can be raised very considerably if scientific methods of dry farming are adopted in the bunded areas. It is, therefore, proposed to establish several demonstration centres, where the Bombay Dry Farming method will be demonstrated on farms of selected farmers. The selected farmers will be supplied with sets of dry farming implements, each set costing about Rs. 120. The total cost is estimated at Rs. 1,00,000.

SCHEME NO. 19.

Name of the Scheme.—**Land Utilization survey of Government Waste Lands.**

Recurring	... Rs.	4,30,000	Non-recurring	Rs.	*Nil.*
Total	... ,,	4,30,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—About 14 lakh acres of Government waste lands scattered all over the Bombay State have still to be surveyed. It is proposed to survey this land during the Second Plan period. If this area is surveyed, it will be possible to know how much of it is in fact fit for cultivation with or without land improvement measures, and which is not fit for the purpose and hence should not be leased out for cultivation, but reserved either for grazing or for afforestation.

SCHEME NO. 20.

Name of the Scheme.—**Introduction of Survey and Settlement.**

Recurring	... Rs.	1,95,30,700	Non-recurring	... Rs.	3,300
Total	... ,,	1,95,34,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The scheme envisages introduction of survey for the purpose of Record of Rights, classification and settlement of unsettled villages in the merged areas of Bombay State. The scheme was sanctioned in 1954–55. Only a part of the scheme is proposed to be implemented during the Second Five-Year Plan. The [illegible]gress of the settlement work is expected to be speeded up as a result of the abolition of special tenures. The number of villages expected to be surveyed and classified and settled under this scheme during the Second Five-Year Plan is 3,012, 3,036 and 2,097 respectively at an estimated cost of Rs. 1·27 crores. This will leave only Akarband work in about 2,262 villages at the end of the Second Five-Year Plan.

A total provision of Rs. 1,95,34,000 has been made in the Second Five-Year Plan for the following items :—

	Amount Rs.
(1) Introduction of Survey and Settlement	1,27,20,000
(2) Introduction of Classification in pre-merged inam villages	4,79,000
(3) Original and Revision Settlement	24,35,000
(4) *Pot Hissa* measurement work in Surveyed villages where Record of Rights exists	37,38,000
(5) Additional staff in the office of the Settlement Commissioner and Director of Land Records in connection with the Original and Revision Settlements and Introduction of Survey and Settlements	1,62,000
Total ...	1,95,34,000

SCHEME No. 21.

Name of the Scheme.—**Prevention of Fragmentation and Consolidation of Holdings.**

Recurring	... Rs.	70,20,000	Non-recurring	... Rs.	*Nil.*
Total	... „	70,20,000	Ultimate annual recurring.	„	*Nil.*

Remarks.—In order to eradicate the evils of excessive fragmentation and sub-division of agricultural holdings which was seriously hampering progress in agriculture, the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947, was brought into force. The scheme deals with the implementation of the Act which is a two-fold measure for (*i*) Prevention of Fragmentation and (*ii*) Consolidation of holdings in the villages notified for the purpose and is at present in operation, the implementation of which is required to be extended throughout the State except in specified areas. Consolidation schemes in respect of 2,025 villages covering an area of 30·34 lakh acres are likely to be completed by the end of the First Five-Year Plan. The work was till now restricted to pre-merged areas and is proposed to be extended to the merged areas also. Lands of about 34,750 villages of the Bombay State (excluding the Bombay Suburban District, the Dangs District and the municipal and town areas of other Districts which are not to be considered for Consolidation of Holdings) covering an area of 4·6 crore acres (approximately) are required to be brought under consolidation out of which, it is proposed to cover 4,365 villages covering an area of 75·99 lakh acres at an estimated cost of Rs. 70·20 lakhs during the Second Five-Year Plan period as shown below :—

Serial No.	District	Number of villages estimated to be completed	Area estimated to be covered (acres in lakhs)
1	2	3	4
1	Banaskantha	125	0·92
2	Sabarkantha	100	0·75
3	Mehsana	160	2·54
4	Amreli	100	1·87
5	Baroda	100	0·73
6	Ahmedabad	210	5·44
7	Kaira	140	2·03
8	Panchmahals	125	0·82
9	Broach	150	2·11
10	Surat	150	1·61
11	East Khandesh	180	3·87
12	West Khandesh	200	3·15

Serial No.	District	Number of villages estimated to be completed	Area estimated to be covered (acres in lakhs)
1	2	3	4
13	Nasik	160	3·07
14	Ahmednagar	170	4·26
15	Poona	140	3·19
16	North Satara	140	2·46
17	South Satara	70	2·63
18	Kolhapur	140	2·08
19	Sholapur	200	5·76
20	Thana	250	1·01
21	Kolaba	375	1·72
22	Ratnagiri	140	1·81
23	Belgaum	240	6·43
24	Dharwar	270	5·92
25	Bijapur	180	7·26
26	Kanara	150	0·85
	TOTAL ...	4,365	75·99

SCHEME No. 22.

Name of the Scheme.—**Reclamation of Khar and Khajan Lands.**

Recurring .. Rs. 5,00,000 Non-recurring .. Rs. 14,94,000

Total .. „ 19,94,000 Ultimate annual recurring „ *Nil.*

Remarks.—Due to ingress of sea water in agricultural lands along the coasts of the State, these lands have been rendered completely or partially unfit for cultivation. In order to reclaim and improve such lands the scheme envisages construction of embankments where they are not in existence or repairs to those that are in dilapidated condition so as to prevent sea water from entering into such agricultural lands and thereby help increase in food production.

2. The Bombay Khar Lands Act was applied in July 1949 to the coastal districts of Broach, Surat, Thana, Bombay Suburban District, Kanara, Kolaba, Ratnagiri and the merged States of Janjira and Cambay. Under this Act Government has constituted the Khar Lands Development Board with power to formulate and execute reclamation schemes for individual units. The cost of

reclamation is shared by the Government, landlords and tenants in the proportion of 2 : 2 : 1. By the end of the First Five-Year Plan an area of about 1,25,000 acres is likely to have been reclaimed out of the total area of 3,00,000 acres of Khar land in this State. It is proposed to take up reclamation schemes covering an area of about 16,261 acres at a total cost of Rs. 19,94,000 during the Second Plan period. According to the provision of the Act 60% of the total cost of the scheme is to be recovered from the landlords and tenants if the lands are private. As most of the lands to be reclaimed are Government lands the entire cost will have to be borne by Government in the first instance and in the case of private lands 60% contribution will have to be recovered only after the lands are reclaimed the cost being initially met by Government. As the recovery of popular contribution through occupancy price takes time it is not certain whether any recovery will be made during the period of the Second Five-Year Plan. The entire cost of Rs. 19,94,000 is, therefore, included in the Plan as Government expenditure.

SCHEME No. 23.

Name of the Scheme.—**Introduction of Record of Rights in Khoti and Inam Villages.**

Recurring	... Rs.	26,83,000	Non-recurring	... Rs.	*Nil.*
Total	... ,,	26,83,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—There are 961 Khoti villages and 1,192 Unsurveyed Inam Villages in the State. In the absence of Record of Rights in these villages, the Khots and Inamdars were found to take undue advantage. It was also difficult to plan systematic development in these villages for want of adequate village statistics. It was, therefore, decided to introduce Record of Rights in these villages under the Bombay Land Revenue Code. The scheme was accordingly taken up in the year 1947–48 under the Post-War Reconstruction and Development Programme. It was originally proposed to complete the work by the end of 1955–56. But due to the difficulties in getting the staff and survey equipment as also the period taken in training the newly recruited staff etc. the original targetted date could not be adhered to. The position pertaining to the progress of this scheme is as follows :—

Item	Total number of villages to be dealt with	Number of villages completed till 31st July 1955	Number of villages estimated to be dealt with in	
			1955–56	1956–57
1	2	3	4	5
Khoti villages—				
(*i*) Survey	961	803	81	72
(*ii*) Record of Rights writing...	961	583	105	273
Inam villages	1,192	934	171	87

It will be observed from the above statement that the work of Introduction of the Record of Rights in all the Khoti and Inam Villages will now be completed by the end of 1956–57. It will, therefore, be necessary to continue the staff appointed for the purpose during the year 1956–57 at an estimate cost of Rs.11·59 lakhs. It is also necessary to appoint additional establishments in certain districts for the introduction of Record of Rights in surveyed villages in merged areas and to bring them upto date. The cost on account of the additional staff is estimated at Rs. 15·24 lakhs. An equal provision has, therefore, been made in the Second Five-Year Plan.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(MINOR IRRIGATION)

Among the various measures undertaken by Government for increasing food production, minor irrigation occupies an important place. In addition to the various major irrigation schemes, Government took up several emergency irrigation works which could be completed within as short a time as possible. The Government of India also sanctioned loans for special programmes of minor irrigation works in the scarcity areas of the State. So far, about 1,676 minor irrigation works out of a total of 1,937 works undertaken under different programmes have been completed. Some tube-wells undertaken under the First Five-Year Plan also require to be completed during the period of the Second Five-Year Plan. A total provision of Rs. 329·57 lakhs has, therefore, been made in the Second Five-Year Plan to complete the following works in the scarcity areas and other minor works including the Tube Wells :—

Name of Work	Amount required for completion Rs.
(1) Jamda Left Bank Canal	4,87,200
(2) Sayadnagar Bandhara	21,48,844
(3) Extension of the existing Girna (Right Bank) Canal ..	8,59,982
(4) Khadak Ozar	11,90,797
(5) Karwand Tank	78,81,859
(6) Vairag Tank	2,94,626
(7) Other works, including Tube Wells	2,00,94,192
Total ..	3,29,57,500

A provision of Rs. 1·5 crores is also made for undertaking new minor irrigation works in the State during the period of the Second Five-Year Plan.

The schemes are briefly described as scheme Nos. 24–31 below :—

SCHEME No. 24.

Name of the Scheme.—**Jamda Left Bank Canal.**

Recurring ... Rs.. *Nil.* Non-recurring ... Rs. 4,87,200

Total ... ,, 4,87,200 Ultimate annual recurring. ,, *Nil.*

Remarks.—The Scheme consists of remodelling the Jamda Left Bank Canal in the East Khandesh District to carry increased discharge of 250 cusecs with a view to irrigating an additional area of 11,720 acres. The scheme was taken up as a scarcity work in the First Plan period and has been nearly completed.

SCHEME No. 25.

Name of the Scheme.—**Sayadnagar Bandhara.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 21,48,844

Total ... ,, 21,48,844 Ultimate annual recurring ,, *Nil.*

Remarks.—The scheme consists of construction of a bandhara and channel on the Panzara River near Sayadnagar in Sakri taluka of West Khandesh District at an estimated cost of Rs. 40,92,648 to irrigate 11,600 acres on completion. The scheme was taken up as a scarcity work under the First Plan and will be completed during the Second Five Year Plan period.

SCHEME No. 26.

Name of the Scheme.—**Girna (Right Bank) Extension Canal.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 8,59,982

Total ... ,, 8,59,982 Ultimate annual recurring. ,, *Nil.*

Remarks.—This project consists of extending the Girna Right Bank Canal by 14 miles to irrigate 10,000 acres more in the Kharif season. In 1953 extension of the canal up to the first 5 miles was undertaken as a scarcity work at an estimated cost of Rs. 10,81,449. The cost has since been revised to Rs. 12,75,111. The extension up to 5 miles on its completion would irrigate 2,700 acres in Kharif season. The provision made in the Second Plan is for completion of the work on this project.

SCHEME No. 27.

Name of the Scheme.—**Khadak Ozar.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 11,90,797

Total ... ,, 11,90,797 Ultimate annual recurring. ,, *Nil.*

Remarks.—The scheme consists of construction of an irrigation tank on the Vadali river near Khadak Ozar in the Chandor taluka of Nasik District at an estimated cost of Rs. 17,04,739. The scheme was taken up during 1952-53 as a scarcity work and is expected to irrigate 3187 acres on completion. The provision made in the Second Plan is for completion of the work.

SCHEME No. 28.

Name of the Scheme.—**Karwand Dam.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 78,81,859

Total ... ,, 78,81,859 Ultimate annual recurring. ,, *Nil.*

Remarks.—This scheme consists of construction of a dam over the Arunavati River in the Shirpur Taluka of West Khandesh District. In 1953 the scheme was being investigated but during the same year it was also started as a famine work. Detailed investigations are now in progress for constructing the dam with a gross storage capacity of 1250 m. cft. with two waste weir channels to irrigate 17,300 acres. The catchment area of the site is 250 square miles. The cost of the scheme is estimated at Rs. 78·81 lakhs approximately.

SCHEME No. 29.

Name of the Scheme.—**Vairag Tank.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 2,94,626

Total ... ,, 2,94,626 Ultimate annual recurring. ,, *Nil.*

Remarks.—The scheme consist of construction of an irrigation tank at Vairag in the Barsi Taluka of Sholapur District at an estimated cost of Rs. 5,77,041 to irrigate 667 acres and for removal of acute shortage of water supply felt by the town at present. A provision of Rs. 2,94,626 has been made under the Second Five-Year Plan for its completion.

SCHEME No. 30.

Name of the Scheme.—**Other Works including Tube Wells**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 2,00,94,192

Total ... ,, 2,00,94,192 Ultimate annual recurring. ,, *Nil.*

Remarks.—This scheme includes a large number of minor works taken up in different parts of the State from time to time which could not be completed during the First Five-Year Plan period. It also includes 61 tube wells which remained to be drilled in the North Gujarat out of the target of 400 tube wells. A provision of Rs. 2,00,94,192 has been made in the Second Five-Year Plan to complete all these works.

SCHEME No. 31.

Name of the Scheme.—**New Works**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,50,00,000

Total ... ,, 1,50,00,000 Ultimate annual recurring. ,, *Nil.*

Remarks.—Under this scheme various minor irrigation works will be started in the State the details of which have not been settled. It is estimated that about 30,000 acres of land would be brought under irrigation towards the end of the Plan period by the several works proposed to be taken up under this programme.

SCHEME No. 32.

Name of the Scheme.—**Tube Wells.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 1,50,00,000

Total .. „ 1,50,00,000 Ultimate annual recurring. „ *Nil.*

Remarks.—There are wide stretches of alluvial strata in North Gujarat, particularly in Ahmedabad, Mehsana and Banaskantha Districts, which bear a fixed quantity of underground water suitable for irrigation purposes. It has been found that if tube wells are sunk in this area to a sufficient depth and on more scientific lines they might yield at least 25,000 gallons of water per hour per well. A scheme for sinking 400 tube wells was, therefore, taken up under the First Five-Year Plan, for which a provision of Rs. 2 crores was made. In the Second Five-Year Plan it is proposed to undertake a similar programme for sinking about 400 tube wells at an estimated cost of Rs. 1·5 crores. For completion of the tube wells undertaken in the First Plan a separate provision has been included in the scheme of Minor Irrigation Works *vide* Scheme No. 30 above.

SCHEME No. 33.

Name of the Scheme.—**Improvement of irrigation wells.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 7,27,000

Total .. „ 7,27,000 Ultimate annual recurring. „ *Nil.*

Remarks.—Though several major and minor irrigation projects have already been taken up in the First Five-Year Plan and several others are proposed to be taken up in the Second Five-Year Plan, well irrigation will continue to be a major source of irrigation. The cultivators are keen to augment the supply of water in the wells by tapping deeper under-ground water-bearing strata by boring and blasting. The Department has at present 102 power boring machines out of which it is proposed to work 26 boring machines departmentally during the Second Five-Year Plan period.

Some District Development Boards and District Local Boards are working one or two machines each belonging to the Agricultural Department. They will be allowed to continue to do so.

The programme of work consists of drilling 840 bores with the help of 24 machines and blasting of 840 wells. It is expected that 8,500 acres of additional area will be brought permanently under irrigation at the end of the Five-Year Plan period.

AGRICULTURE AND COMMUNITY DEVELOPMENT.

(WAREHOUSING AND MARKETING).

SCHEME No. 34.

Name of the Scheme.—**Marketing Survey and Research.**

Recurring	.. Rs. 1,00,000	Non-recurring	.. Rs. *Nil.*
Total	.. ,, 1,00,000	Ultimate annual recurring.	,, 20,000

Remarks.—The scheme for marketing survey of different agricultural commodities has been in vogue in this State since 1935. Surveys of various commodities like cereals, pulses, oil-seeds, fruits, vegetables spices, etc., have been undertaken and so far 32 reports of different commodities have already been prepared and published by the Government of India. In addition, the reports on Statewise basis in respect of certain commodities have been completed while similar reports in respect of other commodities are proposed to be written.

Though the work has been in progress in this State since 1935 the number of officers appointed to undertake this work has been progressively decreasing with the result that there is only one officer left for this type of work. It is proposed to raise the status of this officer from Class II to Class I and to give him adequate staff for compilation of statistics and drafting of the reports. The cost on account of upgrading of this post and appointment of additional staff is estimated at Rs. 1 lakh during the period of the Second Five-Year Plan.

SCHEME No. 35.

Name of the Scheme.—**Development of Agricultural Marketing.**

Recurring	.. Rs. 1,15,000	Non-recurring (of which Rs. non-recurring subsidy is Rs. 00·30 lakhs).	80,30,000
Total cost	.. ,, 81,45,000	Ultimate annual recurring.	,, 23,000

Remarks.—There are 171 major assembling markets and about 106 minor assembling markets in the Bombay State. Of those 101 major markets and 76 minor markets have been so far regulated under the Bombay Agricultural Produce Markets Act, 1939. It is proposed to bring the remaining major and minor markets within the purview of regulation during the Second Five-Year Plan period.

In order to enable the regulated markets to enforce the provisions of the Bombay Agricultural Produce Markets Act and Rules properly and effectively, it is proposed to equip the market yards with all essential amenities and facilities. This involves expenditure for acquisition or purchase of suitable sites for market yards and for construction of buildings, rest-houses, cattle-cheds, godowns, fencing, etc. It is not possible for the Market Committees to meet this expenditure from their own funds as their sources of income are meagre. The amount required for this purpose will have to be made available to those markets by way of loans.

About 240 persons will be provided with employment by the Market Committees to work as Secretaries or Clerks. Seven persons will be employed by the Government for execution of the scheme. In addition the scheme will provide indirect employment in construction activity expected to cost about Rs. 60 lakhs.

It is estimated that each Market Committee will require a loan of Rs. 65,000 for purchase or acquisition of site and for undertaking various developments. Since all 171 markets are proposed to be established by the end of the Second Five-Year Plan a provision of Rs. 80 lakhs is proposed for the purpose. In addition a provision of Rs. 0·30 lakhs for giving subsidies to newly established market committees in the initial stages to enable them to start functioning is necessary. The additional staff necessary for the implementation of the scheme, is expected to cost Rs. 1·15 lakhs. The total cost of the scheme will thus be Rs. 81·45 lakhs as shown below :—

	Rs.
Expenditure on staff	1·15 lakhs.
Loans	80·00 lakhs.
(*i*) Recurring subsidy	......
(*ii*) Non-recurring subsidy	0·30 lakhs.

The shares of the Central and State Governments are as shown below :—

Name of Item	Government of India's Share	State Government's Share	Total
	Rs.	Rs.	Rs.
Staff ...	......	1·15 lakhs	1·15 lakhs
Loans ...	40·0 lakhs	40·0 „	80·00 „
Subsidy (Non-recurring.	0·15 „	0·15 „	0·3 „
Total ...	40·15 lakhs	41·30 lakhs	81·44 lakhs

SCHEME No. 36.

Name of the Scheme.—**Co-ordinated Marketing News Service.**

Recurring ...	Rs. 2,23,000	Non-recurring ...	Rs. *Nil.*
Total cost ...	„ 2,23,000	Ultimate annual recurring.	„ 45,000

Remarks.—Marketing intelligence has a vital bearing on the prices of agricultural commodities in a local market. It is, therefore, necessary that the agricultural producers should have facilities of knowing the prices ruling in the consuming markets. At present, the advantages of market intelligence service are available to traders and commission agents but not to the agriculturists, who bring their produce for sale in the market. The Government of India, have, therefore, proposed to have Regional Officers at Port towns and among others one such at Bombay. There would be three field officers situated at suitable centres who would collect information from primary markets within their zones and transmit the same to the Regional Officer. The cost on account of the appointment of the Regional Officer will be entirely borne by the Central Government while the cost on account of the field officers will be borne by the Central Government and the State Government in equal proportion. These officers would be responsible for disseminating market news of different commodities and future trends in the prices and thus assist the agricultural producers in getting fair prices for their produce.

SCHEME No. 37.

Name of the Scheme.—**Development of Warehousing.**

Recurring	...	Rs.	*Nil.*	Non-recurring ...	Rs. 50,00,000
Total cost	...	„	50,00,000	Ultimate annual recurring	„ *Nil.*

Remarks.—The All India Rural Survey Credit has recommended establishment of warehouses through (1) All India Warehousing Corporation, (2) State Warehousing Company and (3) Co-operative Societies at important places. It is proposed under the scheme to entrust the work of construction of warehouses at places which are of commercial importance to the All India Warehousing Corporation and to entrust the work of construction of warehouses at minor marketing centres to the State Warehousing Company which is proposed to be established in accordance with the recommendations of the Rural Credit Survey. A sum of Rs. 50 lakhs at a rate of Rs. 10 lakhs per year will be invested in the share capital of the State Warehousing Company during the Second Five-Year Plan period.

SCHEME No. 38.

Name of the Scheme.—**Grading.**

Recurring	...	Rs.	97,000	Non-recurring ...	Rs. 66,000
Total cost	...	„	1,63,000	Ultimate annual recurring.	„ 19,000

Remarks.—Grading of different commodities under Agmark has already been done in the State. Edible oils, ghee and butter are some of the commodities which are graded under Agmark. It is proposed to extend this work and carry it out on a more extensive scale. The scheme is to have three well-equipped laboratories under efficient and technically trained staff for Agmarking ghee, edible oils, etc. at three selected centres in the State, where ghee and edible oils are in abundant supply.

It is expected that the establishment of the laboratories will involve an expenditure of Rs. 1·2 lakhs. It is also proposed to appoint an additional Grading Officer in charge of the scheme.

Out of the total provision of Rs. 1·63 lakhs for the scheme an amount of Rs. 0·43 lakhs will be required for staff and Rs. 1·20 lakhs for subsidy (recurring Rs. 0·54 lakhs and non-recurring Rs. 0·66 lakhs). The five-yearly break-up of the cost is as shown below :—

(Rupees in lakhs)

Particulars	1956–57	1957–58	1958–59	1959–60	1960–61	Total for five years
(1) Staff ...	0·05	0·09	0·09	0·10	0·10	00·43
(2) Subsidy—						
Non-recurring	0·22	0·22	0·22	......	......	0·66
Recurring ...	0·18	0·18	0·18	......	......	0·54
Total ...	0·45	0·49	0·49	0·10	0·10	1·63

SCHEME No. 39.

Name of the Scheme.—**Development of Co-operative Marketing.**

Recurring ...Rs. 7,06,000 Non-recurring ... Rs. 1,54,00,000 (Out of which Rs. 22 lakhs is subsidy towards capital cost).

Total ... „ 161,06,000 Ultimate annual recurring ... Rs. 1,41,000

Remarks.—At present there are 318 Co-operative Marketing Societies in the Bombay State and the Plan aims at organisation of more such marketing societies at important major and minor assembling market as well as at other places where agricultural produce is sold in sizeable quantities. The plan envisages organisation of 60 new Marketing Societies and opening of branches of existing ones so that every major and minor market will be the centre of at least one Co-operative Marketing Society. The large sized Multipurpose Societies which will be organised at suitable places will pool the agricultural produce of their members and send it for sale to the Marketing Societies. The objective is to bring within the purview of Co-operative Marketing about 30 per cent. of the marketable agricultural produce. If the Marketing Societies are to undertake activities of this order, they have to be financially strong and should have adequate storage arrangements. For this purpose, the

Rural Credit Survey Report recommended that Government should participate in the share capital of the societies to the extent of 51 per cent., give the societies financial assistance by way of loans and subsidies for the construction of godowns and make available through Reserve Bank adequate marketing finance which, together with their own resources, will enable the Co-operative Marketing Institutions to command marketing finance of the order of Rs. 10 crores.

About 420 persons will be employed by the Marketing Societies to work as Secretaries, Managers, Godown Keepers, etc. 13 persons will be employed by the department to implement the scheme. In addition the scheme will provide indirect employment in construction activities expected to cost Rs. 1,13,00,000.

Financial stability for marketing societies is proposed to be brought by State participation in the share capital of these societies and it is expected that a sum of Rs. 41·00 lakhs will be required on this account.

For affording storage arrangements, it is proposed to have 600 godowns of small size costing Rs. 10,000 each for multi-purpose societies and 100 big godowns for societies of general type and cotton sale societies at a cost of Rs. 40,000 each. It is also proposed to have about 50 godowns of medium size at a cost of Rs. 20,000 each for branches of marketing societies. The state marketing society will require godowns valued at Rs. 2 lakhs. A sum of Rs. 1,13,00,000 will be required on this item out of which 80 per cent. will be in the form of loan and 20 per cent. in the form of subsidy.

To enable the marketing organisations to appoint technical persons it is proposed to grant subsidies at prescribed rates towards management expenses in the initial years. About Rs. 5·25 lakhs will be required on this item.

The additional staff necessary for implementation of the scheme is estimated to cost Rs. 1·81 lakhs.

The total cost of the scheme will be Rs. 161·06 lakhs the details of which are as shown below :—

	(Rs. in lakhs)
Expenditure on staff	1·81
Loans	91·00
State contribution towards share capital	41·00
Subsidy :	
(*a*) Non-recurring	22·00
(*b*) Recurring	5·25
Total ..	161·06

The share of The Central and State Governments is as shown below :—

(Rupees in lakhs)

Name of the item	Government of India's share	State Government's share	Total.
Staff	....	1·81	1·81
Loans	45·50	45·50	91·00
State contribution towards share capital.	20·50	20·50	41·00
Subsidy :			
(i) Non-recurring ..	11·00	11·00	22·00
(ii) Recurring ..	2·63	2·63	5·25
Total ..	69·63	81·43	161·06

AGRICULTURE AND COMMUNITY DEVELOPMENT

(Animal Husbandry)

Scheme No. 40.

Name of the Scheme.—**Advanced training of Agricultural Officers in Animal Husbandry at Izatnagar.**

Recurring	.. Rs.	1,20,000	Non-recurring	..	Rs.	*Nil.*
Total	.. ,,	1,20,000	Ultimate annual recurring.		,,	*Nil.*

Remarks.—The object of the scheme is to train the Agricultural Officers in advanced course in Animal Husbandry at the Indian Veterinary Research Institute, Izatnagar, so as to enable them to execute the Livestock Extension Projects efficiently in the State.

It is necessary to train some senior Agricultural Officers so that they can advise the public and guide the subordinate staff in implementing the livestock projects. The livestock improvements are proposed to be expanded during the Second Five-Year Plan period and it is essential to undertake training programme for the staff working in the districts. The senior Agricultural Officers will be trained in batches of five each to be deputed to Indian Veterinary Research Institute, Izatnagar, every year. Courses in breeding, feeding and management are proposed to be departmentally conducted, so that the required junior personnel is secured in the first year of the Plan period.

SCHEME No. 41.

Name of the Scheme.—**Expansion of the supervisory staff of the Veterinary Department.**

Recurring	.. Rs.	3,26,000	Non-recurring	.. Rs.	10,000
Total	.. „	3,36,000	Ultimate annual recurrent.	„	65,200

Remarks.—The need for creation of additional offices of the Divisional Veterinary Officers is being keenly felt as there is no proper supervision over the district activities. For the 27 districts of the State there are at present only 8 offices of Divisional Veterinary Officers each having a charge of 3-4 districts and about 35-40 veterinary dispensaries under each. During the Second Five-Year Plan it is proposed to extend the National Extension Service Scheme to the entire State, which means in each district there will be as many dispensaries as there are talukas in the district in addition to 2 Veterinary centres or Branch Veterinary Dispensaries in each taluka. The Divisional Veterinary Officers in addition to carrying out routine inspection of veterinary dispensaries and veterinary centres are expected to keep close supervision over the epizootic occuring in their jurisdiction and to take steps to supress them. At present the Divisional Veterinary Officers are not able to inspect the veterinary dispensaries in their jurisdiction even twice a year or to attend to veterinary activities in their jurisdiction to the extent necessary in view of their large jurisdictions. In order, therefore, to keep close supervision over the District activities it is necessary to appoint one Divisional Veterinary Officer for every District in the State. This will be done by stages. It is accordingly proposed to have at least 5 additional offices of the Divisional Veterinary Officers during the Second Five-Year Plan, 3 in the 1st year and 2 in the 4th year of Plan, so that each Divisional Veterinary Officer would have a charge of 2 districts at the end of the Plan period.

The clerical and other staff required for the office of one Divisional Veterinary Officer is proposed as follows :—

One Head Clerk in the scale of Rs. 100—8—140.

Three Junior Clerks in the scale of Rs. 46—3—85—E.B.—4—125—5—130.

Three peons in the scale of Rs. 30—½—35.

2. Taking into consideration the rapid expansion of the activities of the Department and the introduction of various developmental schemes under the Second Plan the need for additional senior staff in the office of the Director of Veterinary Services is keenly felt. The Deputy Director, who has been given touring duties finds it increasingly difficult to attend to both the duties as Deputy Director and the Personal Assistant to the Director. A separate post of a non-professional Personal Assistant is, therefore, an absolute necessity in the office of the Director of Veterinary Services to enable the Deputy Director to devote his undivided attention to the technical matters and to assist the Director in administrative duties. There is only one post of Superintendent in the miscellaneous gazetted scale of Rs. 220—15—295 in the office and often it becomes impossible for him to supervise the work of the different branches in the office in addition to routine cases in the absence of both the Direcor and the Deputy Director on tour. Two Branch Superintendents,

one for Establishment, Accounts and Audit Sections and the other for Administration and Correspondence sections are, therefore, essential for the Director's office. Similarly, there is a need for appointment of Technical Assistant in the scale of Rs. 210—10—300 in the office. Under the scheme it is proposed to create 2 posts of Branch Superintendents in the scale of Rs. 210—10—300 and to convert the present post of the Superintendent in the Miscellaneous Gazetted scale of Rs. 220—15—295 into that of a Personal Assistant in the scale of Rs. 220—15—400 in the first year of the Plan and to create the post of a Technical Assistant in the scale of Rs. 210—10—300 in the fourth year of the Plan.

3. The scheme under the Second Five Year Plan, therefore, contemplates the creation of the following additional establishment :—

I. *For the Office of the Divisional Veterinary Officers.*

Five posts of Divisional Veterinary Officers, in Bombay Veterinary Service Class II scale of pay, viz., Rs. 220—15—400—E.B.—20—500—E.B.—25—650.

Five posts of Head Clerks in the scale of Rs. 100—8—140.

Fifteen posts of Junior Clerks in the scale of Rs. 46—3—85—E.B.—4—125—5—130.

Fifteen posts of Peons in the scale of Rs. 30—½—35.

II. *For the Office of the Director of Veterinary Services, Bombay State, Poona.*

Two Branch Superintendents in the scale of Rs. 210—10—300.

One Technical Assistant in the scale of Rs. 210—10—300.

Conversion of the present permanent miscellaneous gazetted post of Office Superintendent in the scale of Rs. 220—15—295 into that of Personal Assistant in the scale of Rs. 220—15—400.

SCHEME No. 42.

Name of the Scheme.—**Expansion of the Bombay Veterinary College.**

Recurring ...	Rs.	*Nil.*	Non-recurring ...	Rs.	1,50,000
Total ...	,,	1,50,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—In order to get the required number of veterinary graduates for employment in the districts to meet the growing requirements in veterinary services and the demands of agriculturists and dairymen, the admissions to the Bombay Veterinary College have been raised to 60. The required teaching staff has already been provided. It is proposed under the Second Five Year Plan to provide the following :—

	Rs.
I. *Buildings.*	
(*a*) Patho-Bacterological Laboratory	1,20,000
II. Equipment and Furniture	30,000
Total ...	1,50,000

SCHEME No. 43

Name of the Schme.—**Training of stockmen.**

Recurring ... Rs. 3,46,000 Non-recurring ... Rs. *Nil.*

Total ... „ 3,46,000 Ultimate annual recurring. „ 102,000

Remarks.—At present there are 291 stockmen employed under the scheme for immunization of cattle, etc. excluding 18 stockmen who are working in concentrated areas. It is expected that 301 talukas in the entire State will be covered by 468 National Extension Service Blocks by the end of the Second Five-Year Plan and about 600 stockmen will be required at the rate of 2 stockmen per taluka. In addition 200 stockmen are required for work under the scheme for eradication of Rinderpest from the entire Bombay State, which has been separately proposed for inclusion in the Plan. Besides, a few stockmen will be required for other activities of the Veterinary Department such as, for being attached to veterinary dispensaries where the average daily attendance is large, where the Veterinary Officers have been entrusted with the duties of inspection of local slaughter houses and also for other sections of the Department like Artificial Insemination Section, Serum Institute, etc. Thus the total requirement of stockmen is estimated at about 900.

To meet this demand a scheme for training 150 stockmen per yer (50 stockmen at three Centres each) has been sanctioned by Government in 1955-56. Of the 3 regional Centres one Centre will be run for a period of 2 years and the remaining two for a period of 4 years during the Second Five-Year Plan period. It is estimated that 500 stockmen will be trained at the end of the Second Five-Year Plan.

The following staff for each of the 3 Centres is required for running the scheme :—

One Lecturer in the scale of Rs. 210—10—300.

One Assistant Lecturer in the scale of Rs. 120—250.

One Junior Clerk in the scale of Rs. 46—3—85—E.B.—4—125—5—130.

One Peon in the scale of Rs. 30—½—35.

One Mazdoor in the scale of Rs. 30—½—35.

One Watchman in the scale of Rs. 30—½—35.

One part-time Sweeper on a fixed pay of Rs. 10 per mensem (paid from contingencies).

One Junior Clerk in the scale of Rs. 46—130—in the office of the Principal Bombay Veterinary College.

The trainees are to be provided with free accommodation and paid a stipend of Rs. 30 per mensem each inclusive of messing charges.

The total expenditure on this account during the Second Five-Year plan period is estimated at Rs. 3,46,000.

SCHEME NO. 44.

Name of the Scheme.—**Establishment of a Disease Research Station at Poona.**

Recurring ...	Rs.	*Nil.*	Non-recurring ...	Rs.	1,70,000
Total ...	,,	1,70,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The Livestock work in the State is at present under the control of the Agricultural Department and the Veterinary Department is concerned only with the disease control work. There is a considerable amount of research work to be carried out on diseases of livestock, already known and unkown including those caused by parasites. Research into manufacture of Sera and Vaccines has got to be undertaken with a view to supply to the field cheaper and at the same time more efficacious products. In view of this, it is proposed that a Disease Research Station should be set up in the State to begin with and it should be located along with the Serum Institute, at Poona. The area available at the Serum Institute is 85 acres and additional land would be available in the vicinity. This section may also be able to take up Research into Mastitis which at present is conducted at the Bombay Veterinary College.

Under the Second Five-Year Plan, it is proposed to provide buildings for the Research Station only consisting among other items rooms for three Laboratories for the Bacteriological, Pathological and Parasitological Sections and a big room for a Laboratory for the Officer in charge of the Station.

The other structures essential for the Station are as follows :—

(1) Kitchen.
(2) Media Room.
(3) Store Room.
(4) Small Animal House.
(5) *Post Mortem* room for small animals
(6) Incinerator.
(7) Cattle sheds.
(8) Hay shed.

The total cost involved on the above structures is estimated at Rs. 1,70,000. It is proposed to take up construction work in the fourth year of the Plan so that the building would be ready by the end of the Second Five-Year Plan. The question of appointment of staff, purchase of equipment etc., will be considered later on. The entire cost on construction work will be borne by the Government of India.

SCHEME NO. 45.

Name of the Scheme.—**Scheme for study of cattle sterility.**

Recurring	... Rs.	1,62,000	Non-recurring	... Rs.	5,000
Total	... ,,	1,67,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—A team of Food and Agriculture Organisation experts in Animal Gynaecology and Obstetrics toured in the country and made a survey of the cattle tracts, Veterinary Colleges and other Institutions in the country with particular reference to problems of sterility and artificial insemination in cattle. In the report submitted by the experts to the Government of India it has been stated that in other countries great advances have been made within the last 20 years in the diagnosis and treatment of sterility in cattle but little appeared to have so far been done in this country on a comprehensive scale, to deal with this potential danger to the developing dairy industry. Intensive husbandry favours infertility. The problem is of all-India importance and most urgent and should be tackled without any further delay to help the country to produce better stock both for milk and draught so essential to solve the food problem in the shape of milk and cereals by producing efficient bullocks for power. With this end in view a scheme was submitted to the Indian Council of Agricultural Research for being financed partly by the State Government and the Council on 50 : 50 basis. The Food and Agriculture Organisation experts have their full support to this Scheme.

The Scheme at present is sanctioned for a period of four years ending by the middle of 1958-59 but in view of the importance of the Scheme, it will be continued during the entire period of the Second Five-Year Plan.

It is proposed to have the following staff for the execution of the Scheme :—

(1) One Regional Sterility Officer in Bombay Veterinary Service—Class I.

(2) Two Research Assistants in the scale of Rs. 210—10—300.

(3) One Stockman-*cum*-Compounder in the scale of Rs. 55—3—85—E.B.—4—125—5—140.

(4) Two Laboratory Attendants in the scale of Rs. 30—½—35.

(5) One Steno-typist in the scale of Rs. 46—3—85—E.B.—4—125—5—130 (with special pay of Rs. 35 per mensem).

(6) One Peon in the scale of Rs. 30—½—35.

SCHEME No. 46.

Name of the Scheme.—**Scheme for the Investigation of Mastitis.**

Recurring	... Rs.	56,000	Non-recurring	...	Rs.	*Nil.*
Total	... ,,	56,000	Ultimate annual recurring.		,,	*Nil.*

Remarks.—The Scheme for the investigation of Mastitis in Bombay State has been sanctioned by Government up to the 31st March 1956, with the following staff :—

(1) One Research Assistant in the scale of Rs. 210—10—300.

(2) One Laboratory Assistant in the scale of Rs. 46—3—85.

(3) One Peon-*cum*-Mazdoor in the scale of Rs. 35—½—40.

The expenditure on the scheme is to be borne by the Bombay Government and the Indian Council of Agricultural Research on 50 : 50 basis. It is contemplated to continue the scheme during the entire period of the Second Five-Year Plan. The expenditure for the scheme during the Second Five-Year Plan is estimated at Rs. 56,000.

SCHEME No. 47.

Name of the Scheme.—**Scheme for the control of main fluke diseases of Bovines with special reference to Nasal Schistosomiasis.**

Recurring ...	Rs.	60,000	Non-recurring ...	Rs.	Nil.
Total ...	,,	60,000	Ultimate annual recurring.	,,	Nil.

Remarks.—The scheme for the control of main-fluke diseases of Bovines in the Bombay State with special reference to Nasal Schistosomiasis has been sanctioned by Government for a period up to the 31st March 1958 with the undermentioned staff :—

(1) One Veterinary Officer to be in charge of the Scheme in the scale of Rs. 210—10—300.

(2) One Stockman in the scale of Rs. 55—3—85—E.B.—4—125—5—140.

(3) One Kamgar (Mazdoor) in the scale of Rs. 30—½—35.

The Indian Council of Agricultural Research has agreed to bear 50 per cent. of the total expenditure of the Scheme.

The Scheme is proposed to be continued during the entire period of the Second Five-Year Plan. The expenditure for the Scheme during the Second Five-Year Plan is therefore, estimated at Rs. 60,000.

SCHEME No. 48.

Name of the Scheme.—**Introduction of Artificial Insemination as a method of rapid breeding of cattle.**

Recurring ...	Rs.	2,94,500	Non-recurring ...	Rs.	5,500
Total ...	,,	3,00,000	Ultimate annual recurring ...	,,	62,250

Remarks.—Artificial Insemination as a method of breeding cattle, particularly dairy cattle, offers considerable prospects of promoting the improvement of livestock. Government has, therefore, decided to set up an Artificial Insemination Section in this State. Under this Scheme the main Artificial Insemination Centre has been established at Poona in the year 1951 under the charge of an officer specially trained in the United Kingdom in this new technique. Sub-centres have been started at the Veterinary Dispensaries at Junnar, Saswad and Baramati in Poona District, Sangamner in Ahmednagar District, Phaltan in North Satara District and at Kauthi Adda and Veterinary Hospital in the Poona City proper.

The following staff is sanctioned for the present scheme :—

One Artificial Insemination Officer in B. V. S. Class II.
Two Assistant Artificial Insemination Officers in the scale of Rs. 210—10—300.
One Research Assistant in the scale of Rs. 120—250 (with special pay of Rs. 30 per month.).
One Senior Clerk in the scale of Rs. 100—8—140.
Two Junior Clerks in the scale of Rs. 46—130.
One Junior Clerk-*cum*-Laboratory Assistant in the scale of Rs. 46—130.
Three Stockmen in the scale of Rs. 55—3—85—E.B.—4—125—5—140.
Five Peons in the scale of Rs. 30—½—35.
One Van Driver on fixed pay of Rs. 55 p.m.
Four Gavalas on fixed pay of Rs. 30 per month each.
} paid from contingencies.

Under the Second Five-Year Plan the existing activities will continue. The cost on this account is estimated at Rs. 3,00,000. By the end of the Second Five-Year Plan every taluka or peta will be covered by National Extension Service or Community Development Block Scheme and the Artificial Insemination Scheme will expand by establishing main Centres and sub-Centres wherever found suitable. The funds, on this account will, however, be made available from the National Extension or Community Development Project Schemes.

Scheme No. 49.

Name of the Scheme.—**Assumption of full control of Veterinary Dispensaries by Government.**

Recurring ...	Rs. 10,80,000	Non-recurring ...	Rs. Nil.
Total ...	,, 10,80,000	Ultimate annual recurring ...	,, 1,27,000

Remarks.—At present the District Local Boards and the Municipalities maintain a certain number of veterinary dispensaries with financial assistance from Government by way of grant-in-aid and free services of Veterinary Officers. The maintenance of Veterinary Dispensaries is not, however, an obligatory function of local bodies and their maintenance and expansion depends on their will, financial position and other local factors. Owing to financial difficulties certain local bodies are reluctant to continue to maintain the veterinary dispensaries and prefer them to be taken over by Government. The Veterinary Officers are Government servants while the other staff at such dispensaries is maintained by local bodies. The dual control in the working of the local body dispensaries also presents many practical difficulties with the result that progress of such institutions is hampered. For these reasons, a scheme for gradual assumption of full control of Veterinary Dispensaries maintained by local bodies was launched in this State. Since 1946, however, control of only 32 Veterinary Dispensaries has so far been taken over by Government. It is proposed under the Second Five-Year Plan to assume control of 40 additional Veterinary Dispensaries run by the local bodies at present, by stages, viz., at the rate of 8 veterinary dispensaries every year. The total expenditure on this account is estimated at Rs. 10,80,000.

Scheme No. 50.

Name of the Scheme.— **Expansion of the Serum and Vaccine Institute for the manufacture of Sera and Vaccines.**

Recurrent ...	Rs. 1,07,400	Non-recurrent ...	Rs. 2,14,600
Total ...	,, 3,22,000	Ultimate annual recurrent ...	,, 22,748

Remarks.—Owing to the difficulties experienced in obtaining from outside sources sera and vaccines in time for prompt control of contagious diseases a Serum Institute has been established at Bombay in the year 1948 with the Superintendent, Biological Products, an Officer in the Bombay Veterinary Services Class I, as its head. The Goat Virus Producing Station at Bombay and the Goat Virus Substations at Baroda and Jalgaon, all producing Goat Virus Vaccine, and the Ranikhet Disease Vaccine Laboratory at Poona producing Ranikhet Disease Vaccine are also under his control.

At present the Serum Institute manufactures about 8,00,000 doses of each Hæmowhagic Septicaemia and Black Quarter vaccines and a few thousand doses of Sheep and Goat Pox vaccine. It is proposed to shift the Serum Institute to Poona where a building for the Institute is under construction. Under the Second Five-Year Plan it is proposed to provide necessary facilities to enable the Institute to expand its activities and to meet in full the demands of the State in respect of Sera and Vaccines.

At present, the working staff for performing various types of duties has been sanctioned for the Institute but when the Institute is shifted to Poona and starts functioning in full swing the following additional staff will be required :—

(1) One Assistant Superintendent (Bact. Vaccines) in the Bombay Veterinary Services Class II.

(2) One Research Assistant in charge of Media and Sterilization in the scale of Rs. 210—10—300.

(3) One Storekeeper in the scale of Rs. 46—130.

(4) One *Post Mortem* Attendant in the scale of Rs. 30—½—35.

(5) Two Laboratory Assistants in the scale of Rs. 46—3—85.

(6) Six Laboratory Attendants in the scale of Rs. 30—½—35.

(7) One Peon in the scale of Rs. 30—½—35.

(8) Two Chowkidars in the scale of Rs. 30—½—35.

(9) One Packer in the scale of Rs. 30—½—35.

The construction work for the buildings of the Serum Institute which has been undertaken during the course of the First Five-Year Plan will be completed by the first year of the Second Five-Year Plan period and as such the above staff will be required during the second year of the Plan period.

After shifting of the Serum Institute to Poona, it will be necessary to provide additional equipment and furniture for the Institute. It will also be necessary to provide the Institute with certain subsidiary structures, such as Trevis, Shed for bleeding animals, etc., for which a non-recurring expenditure of Rs. 2,14,600 will be necessary.

Scheme No. 51.

Name of the Scheme.—**Immunization of cattle against diseases.**

Recurrent ...	Rs.	12,76,000	Non-recurrent	... Rs.	*Nil.*
Total ...	,,	12,76,000	Ultimate annual recurrent	... ,,	3,24,100

Remarks.—Shortage of improved live-stock has hampered agricultural operation and dairying. Under the cattle breeding schemes steps are being taken to raise cattle. But it is necessary to preserve this cattle in good health and to reduce the high rate of cattle mortality among potential draught and the other live-stock by carrying out mass immunization of cattle against various contagious diseases such as Rinderpest, Black Quarter, Hæmorrhagic Septicaemia, etc., since the incidence of epizootics acts as an obstacle to the improvement of live-stock. With these ends in view, a scheme for mass immunization of cattle was launched in this State and the stockmen trained by the Department were entrusted with this work. Simultaneously immunization of cattle against Rinderpest and Black Quarter in Sangola and Pandharpur Talukas of Sholapur District which are famous for Khillar breed and immunization of milch buffaloes in Bombay City and Bombay Suburban District against Rinderpest was undertaken. Concentrated efforts were also made to protect cattle entering grazing areas of the Satpuras in West Khandesh District from Madhya Pradesh to prevent the ingress of diseases into Bombay State. Stockmen working under the scheme are attached to various dispensaries giving due regard to the breeding tract and grazing areas.

At present, the following staff is employed on the scheme :—

(1) Three Veterinary Officers in the scale of Rs. 120—8—160—10—200—E.B.—10—250.

(2) Two hundred and nineteen stockmen in the scale of Rs. 55—3—85—E.B.—4—125—5—140.

(3) Fifty attendants in the scale of Rs. 30—½—35.

(4) One clerk in the scale of Rs. 46—3—85—E.B.—4—125—5—130.

Under the Second Five-Year Plan it is proposed to continue the existing activities of the Scheme and the total expenditure on this account is estimated at Rs. 12,76,000.

SCHEME No. 52.

Name of the Scheme.—**Eradication of Rinderpest.**

Recurrent ...	Rs.	13,38,600	Non-recurrent ...	Rs.	71,400
Total ...	„	14,10,000	Ultimate annual recurrent ...	„	*Nil.*

Remarks.—Rinderpest causes about 60 per cent. of the total cattle mortality in the country. The Planning Commission has, therefore, after realising the importance of this disease included a scheme for eradication of this disease from the country under the Government of India's "Ten Year Programme of Land Transformation". Accordingly a Pilot Project has been launched in this State in the First Five-Year Plan under which four districts, viz., Dharwar, North Kanara, Belgaum and Bijapur will have been covered by the end of March 1956. It is proposed to continue the work already undertaken under this Scheme during the Second Five-Year Plan period and to cover the remaining 24 districts of the State within a period of two years, i.e. by the end of March 1958.

The entire cattle population of the State according to the 1951 Census is 1,60,77,000 of which calves under six months number about 12 lakhs. The total cattle and buffaloe population to be protected would, therefore, be 1,48,77,000. At the end of the First Five-Year Plan about 24,00,000 head of cattle and buffaloes will have been protected leaving about 1,24,77,000 animals to be protected during the period of the Second Five-Year Plan. Mass immunization of all adult cattle and buffaloes over six months will be carried out. It is expected that more than 70-75 per cent. of the total cattle and buffaloe population will be protected under the Scheme.

There are on an average 12 talukas in a District with an average cattle population (excluding calves below six months) of 5,70,000 i.e. 47,500 per taluka. It has been estimated that taking all factors into consideration, a stockman can vaccirate and brand on an average 100-150 animals a day or 2,500 animals per month or 20 working days. On this basis, 16 teams of 4 stockmen each will be able to cover four talukas within a month and the whole District within a period of 3 months. It is proposed to start the work in three Districts simultaneously. The work in the three Districts will be completed within a period of three months and in a year about 12 Districts will be covered. Thus in a period of 2 years remaining 24 Districts will be covered.

Each team which will move from village to village will consist of 4 stockmen with a Veterinary Officer at its head and will be assisted by one Attendant for collecting, securing animals, etc. The work of all teams in a District, viz., 16 will be supervised by an Assistant Rinderpest Officer in the grade of Rs. 210—10—300, who will also arrange for the supply of vaccine to the parties in different talukas. The entire Scheme will be in the charge of the Special Rinderpest Officer in the Bombay Veterinary Services Class I, who will guide the work and be responsible for the proper execution of the Scheme.

It is proposed to complete the work in the entire State within a period of two years and hence the programme of work is arranged, as shown below :—

Year		Names of Districts
1st Year (1956–57)	...	1. Sholapur, 2. South Satara, 3. Kolhapur, 4. Ratnagiri, 5. North Satara, 6. Poona, 7. Ahmednagar, 8. Kolaba, 9. Thana, 10. Bombay Suburban District, 11. Nasik, and 12. East Khandesh.
2nd Year (1957–58)	...	1. West Khandesh, 2. Surat, 3. Dangs, 4. Broach, 5. Baroda, 6. Panch Mahals, 7. Kaira, 8. Ahmedabad, 9. Sabarkantha, 10. Mehsana, 11. Amereli, and 12. Banaskantha.

Efforts will be made to finish the work within the stipulated period of two years, but if it is not found practicable, an extension of Scheme for a period of six months or so would be necessary.

Staff.—It is proposed to put the following staff on the Scheme for a period of two years or till the completion of the work under the Scheme :—

One Special Rinderpest Officer in the Bombay Veterinary Sevices Class I in the scale of Rs. 350—30—650—E.B.—45—1,100.
Three Assistant Rinderpest Officers in the grade of Rs. 210—10—300.
Fifty Veterinary Officers in the scale of Rs. 120—8—160—10—200—E.B.—10—250.
Two hundred stockmen in the scale of Rs. 55—3—85—4—125—5—140.
Fifty Attendants in the scale of Rs. 30—1/2—35.
One Senior Clerk in the scale of Rs. 100—8—140.
One Junior Clerk in the scale of Rs. 46—130.
One Junior Clerk-*cum*-Typist in the scale of Rs. 46—130.
Four Motor Drivers in the scale of Rs. 55—3—85.
Five Peons (1 for the Special Rinderpest Officer, 3 for three Assistant Rinderpest Officers, and one for the office of the Special Rinderpest Officer) in the scale of Rs. 30—1/2—35.

The entire staff will be created under the Scheme excepting 14 posts of Veterinary Officers and 40 of stockmen. Fourteen Veterinary Officers and forty stockmen from the existing cadre of the Veterinary Department working under the Pilot Project will continue to work under the Scheme.

In view of the ardous and exacting duties that the staff under the Scheme will have to discharge and the constant movement from one area to other, a compensatory allowance, as shown below, has been proposed.

Name of the post	Rate of compensatory allowance proposed to each.
3 Assistant Rinderpest Officers	Rs. 45 per mensem.
50 Veterinary Officers	
200 Stockmen	Rs. 15 per mensem.
1 Senior Clerk	
2 Junior Clerks	
4 Motor Drivers	
50 Attendants	Rs. 10 per mensem.
5 Peons	

Since the Veterinary Officers, stockmen and attendants will have to move from village to village a fixed Travelling Allowance of Rs. 30 per mensem to each Veterinary Officer, Rs. 15 per mensem to each Stockman and Rs. 6 per mensem to each Attendant exclusive of temporary increase of 75 per cent. in each case has been proposed as in the Pilot Project.

Equipment such as a Jeep with trailor, one Deep Freeze Cabinet and one Electolux Refrigerator sanctioned by the Government of India on loan for the Pilot Project will be made use of under the Scheme. Since it is proposed to start work in three Districts at a time it will be necessary to purchase two additional Jeeps with trailor and loud speaker, one Station Wagon with loud speaker and two additional Refrigerators. The entire cost on purchase of this equipment will be borne by the Government of India while that on maintenance will be borne by the State Government.

The total cost of the Scheme is estimated at Rs. 14,10,000 of which the Government of India's share (excluding the central share of Rs. 2,25,000 on account of supply of vaccine from the Indian Veterinary Research Institute) is Rs. 6,02,000 and the remaining expenditure of Rs. 8,08,000 will be borne by the Government of Bombay.

SCHEME No. 53.

Name of the Scheme.—**Mass immunization of village poultry against Ranikhet disease.**

Recurrent	.. Rs.	41,000	Non-recurrent	.. Rs.	*Nil.*
Total	.. ,,	41,000	Ultimate annual recurrent.	,,	*Nil.*

Remarks.—The Scheme for mass immunization of village poultry against Ranikhet Disease was sanctioned by Government up to the 29th February 1956 with the following staff :—

(1) Two stockmen in the scale of Rs. 55—3—85—E.B.—4—125—5—140.

(2) One Attendant in the scale of Rs. 30—½—35.

The expenditure on the scheme was to be borne by the Government of Bombay the and Indian Council of Agricultural Research on 50 : 50 basis. The scheme has been continued during the entire period of the Second Five-Year Plan. The expenditure on account of the scheme during the Plan period is estimated at Rs. 41,000. The Research Assistant in charge of the Ranikhet Disease Vaccine Laboratory, Poona, who is in charge of the Scheme is given a special pay of Rs. 50 per mensem for this additional work.

SCHEME No. 54.

Name of the Scheme.—**Research and development of Sheep.**

Recurring	.. Rs.	9,00,000	Non-recurring	..	Rs.	5,65,000
Total	.. ,,	14,65,000	Ultimate annual recurring.		,,	1,80,000

Remarks.—Research on sheep and wool improvement is undertaken at the Central Sheep Breeding Research Station and the Wool Testing Laboratory both at Poona with the object of evolving non-hairy fine wooled strains of sheep by selective breeding of the Deccan sheep and by cross-breeding of the Deccan sheep with the Merino and Rambouillet rams. Six small sheep breeding research sub-stations have been established in the principal sheep rearing areas. At these research sub-stations experimental breeding trials are undertaken with a view to evolving superior strains of sheep to suit local environmental and climate conditions and to multiply the selected types of sheep, particularly rams, for being supplied to Rabaries, shepherds and farmers for grading and improvement of the local non-descript flocks. These sheep breeding research stations are maintaining only a small number of experimental flocks, which has restricted the production of superior types of sheep in large numbers. It is necessary to expand the activities of and to strengthen these institutions so that the facilities for raising adequate number of improved flocks are provided for and the reported number of fine wooled rams are made available. It is proposed to expand the work at these institutions.

SCHEME No. 55.

Name of the Scheme.—**Research and Development of Cattle.**

Recurring	.. Rs.	13,00,000	Non-recurring	..	Rs.	7,70,000
Total	.. ,,	20,70,000	Ultimate annual recurring.		,,	2,60,000

Remarks.—The following items are included under this scheme :—

(*a*) A sum of Rs. 60,000 is paid annually to the Institute of Agriculture, Anand, as grant-in-aid for animal husbandry and dairying work. This will be continued.

(*b*) A sum of Rs. 1,000 is proposed to be paid annually to the Bombay Humanitarian League, Bombay, as grant-in-aid.

(c) It is proposed to establish a Cattle Breeding Farm for the Khillar breed. The experimental herd will comprise 100 breeding cows and a provision of buildings to house a total stock of 500 animals is provided. It would be necessary to acquire land, construct buildings for housing of the staff and arrange for irrigation facilities. The cattle breeding farm when fully equipped, will supply annually twenty-five pedigree bulls of high quality, for being utilized in the grading programme in the Key Villages and in other livestock projects.

(d) It is proposed to start a scheme for rearing of outstanding pure-bred bull calves of the Dangi breed at the Cattle Breeding Station, Igatpuri.

(e) The present scheme of giving assistance to farmers who keep premium bulls for imporving village cattle will be continued.

SCHEME No. 56.

Name of the Scheme.—**Research and Development of Poultry.**

Recurring	.. Rs.	10,00,000	Non-recurring	.. Rs.	5,00,000
Total	.. ,,	15,00,000	Ultimate annual recurring.	,,	2,00,000

Remarks.—A nationwide poultry improvement programme has been formulated by the Central Government, with the object of increasing the production of eggs and poultry meat. Baby chicks, imported from abroad and raised on the existing poultry farms, will be reared up to the age of five months. These birds will then be supplied to cultivators in selected centres. In all, 20 poultry improvement blocks will be selected. In each block 300 birds, 100 males and 200 females, will be located with (i) cultivators and (ii) poultry-keepers in urban areas. Besides, in each centre a Demonstration Farm will be established and enterprising poultry-keepers intending to rear pure-bred birds will be supplied with wire-netting worth Rs. 50 each. Training in improved methods of poultry-keeping will be imparted to selected persons from these blocks and stipends of Rs. 20 per month tenable for a period of 1½ months will be paid to the trainees.

AGRICULTURE AND COMMUNITY DEVELOPMENT.

(DAIRYING AND MILK SUPPLY).

SCHEME No. 57.

Name of the Scheme.—**Milk Supply Scheme for cities in Bombay State.**

Recurring	... Rs.	26,00,000	Non-recurring	... Rs.	14,00,000
Total	... ,,	40,00,000	Ultimate annual recurring	... ,,	5,20,000

Remarks.—The Poona Milk Supply Scheme has benefited both the producers of milk in villages around the city, as well as the consumers of milk in the city. It is proposed to bring about similar development of the dairy industry around four cities in the State having a population of more than 1 lakh each. A scheme for milk supply for the Hubli-Dharwar area is already in operation. Before starting milk supply schemes for these cities, it would be necessary to make a survey of milk supply conditions in and around those cities and also to give necessary training to the staff to be employed for the purpose. Survey and training will, therefore, form the preliminary stage of the scheme. The scheme will benefit about 2,000 cultivators producing milk around these cities and about 12,000 families will receive pure milk. This scheme is to be run on " no profit no loss " basis and hence there is no net cost to Government.

SCHEME No. 58.

Name of the Scheme.—**Additional staff for the Dairy Development Section.**

Recurring ...	Rs. 1,00,000	Non-recurring ...	Rs. *Nil.*
Total ...	,, 1,00,000	Ultimate annual recurring ...	,, 20,000

Remarks.—The activities of the Dairy Development Section will increase very considerably owing to the expansion of the Poona Milk Supply Scheme and the starting of milk supply schemes for 4 other cities in the State. It is, therefore, proposed to augment the staff of the Section.

SCHEME No 59.

Name of the Scheme.—**Establishment of rural milk producing centres for milk supply to cities.**

Recurring ..	Rs. 6,40,000	Non-recurring ..	Rs. 4,00,000
Total ..	,, 10,40,000	Ultimate annual recurring ..	,, 1,30,000

Remarks.—The existing milk supply schemes at Poona and Hubli-Dharwar as well as those proposed for 4 other cities in the State having a population of more than 1 lakh, will mainly benefit the cultivators in the immediate vicinity of these cities. It is proposed under this scheme to organise the cultivators situated at some distance from these cities who are situated near the railway lines so that the milk produced by them can be transported to those cities, thus bringing more profit to them from milk production. Each milk producing centre will comprise about 5,000 cattle. Milk will be collected and transported to Bombay, Poona, etc., where it will be distributed under the milk supply schemes of those cities.

SCHEME No. 60.

Name of the Scheme.—**Expansion of the Poona Milk Supply Scheme.**

Recurring ..	Rs. 33,72,000	Non-recurring ..	Rs.. 3,00,000
Total ..	,, 36,72,000	Ultimate annual recurring ..	,, 6,74,000

Remarks.—The Poona Milk Supply Scheme has shown very encouraging results. At present milk is collected in about 40 villages near Poona from about 375 cultivators. About 3000 families in Poona City are supplied milk under the Scheme. The demand for pure milk supplied under the scheme has increased manifold but cannot be met at present. It is, therefore, proposed to extend the collection of milk to 200 villages, from about 2,000 farmers therein, so that about 12,000 families can be supplied milk every day. Ultimately about 50,000 lbs. milk is expected to be handled per day. The scheme is run on " no profit no loss " basis.

SCHEME No. 61.

Name of the Scheme.—**Milk Supply Scheme for Greater Bombay and Development of National Park.**

Recurring	Rs. 34,30,000	Non-recurring	... Rs. 2,65,70,000
Total ...	,, 3,00,00,000	Ultimate annual recurring ...	,, 686,000

Remarks.—The present Milk Scheme of the Bombay Government was started in 1947 with the main object of ensuring a steady supply of wholesome milk to the people of Bombay, especially the middle class and poor people. The Bombay Milk Supply Plan provides for procurement of good quality milk, its organised distribution, cattle colonisation in modern milk colonies, establishment of Central dairies at Aarey, a village near Bombay and at Anand in Kaira District and bringing statutory control on production, distribution and price of milk.

2. With a view to ensuring adequate supply of milk to a larger number of people, it is proposed to provide additional accommodation for colonisation of 10,000 milch cattle and 10,000 dry and young stock at a suitable place or places. In the suburb and outside fringe of Greater Bombay the cattle population has increased considerably. Legislation is contemplated to control their number; but irrespective of this it is proposed that a second colony should be planned for only 10,000 milking cattle. In due course additional supply of milk would also be obtained from rural areas for which co-operative organisations will be set up where possible. It is also proposed to provide for a third colony for keeping about 7,000 dry animals and 3,000 young stock, either with the milch cattle or elsewhere. The total cost of of the second and third colonies is estimated Rs. 420 lakhs out of which it is proposed to make a provision of Rs. 260 lakhs only during the Second Plan period leaving a spill over of Rs. 160 lakhs in the Third Five-Year Plan. During the Second Plan period it is proposed to establish 20 Dairy Farm Units at the Second Colony to accommodate about 500 at each farm unit and 3 Dairy Farm Units at the Third Colony for dry cattle and young stock. About 500 Milk Distribution Centres would be started by the end of the Second Plan period.

It is also proposed to complete some of the works at the existing Colony at Aarey during the Second Plan period. The cost of completion of these works is estimated to be Rs. 40 lakhs.

3. A total provision of Rs. 3 crores is, therefore, made in the Second Plan. Out of this provision it is expected that the Government of India would provide an amount of Rs. 50·2 lakhs as grant. The balance of the expenditure of Rs. 250 lakhs will be met from the Milk Fund.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(FORESTS)

SCHEME No. 62.

Name of the Scheme.—**Additional staff for management of the Thana and Nasik Woodlands.**

Recurring	... Rs. 6,77,895	Non-recurring	... Rs. 500
Total	... ,, 6,78,395	Ultimate annual recurring.	,, *Nil.*

Remarks.—Consequent on transfer of woodland protected forests in Thana District from Revenue Department to the Forest Department, it is found quite essential to reorganise the existing Ranges, Rounds and Beats in the three Thana

Divisions and to create additional posts with a view to ensure proper protection of forests and their improvement. It is also considered essential to redistribute the forest areas of the East and West Nasik Divisions into manageable units such as rounds and beats to ensure efficient protection and conservation of forests. It is therefore, proposed to appoint additional staff for this purpose under the Second Five Year Plan, at an estimated cost of Rs. 6,78,395.

SCHEME No. 63.

Name of the Scheme.—**Conversion of existing Banaskantha, Chhota-Udepur Sub-Divisions into Divisions and reorganising Panch-Mahals and Baria Divisions and Chhota Udepur and Banaskantha Sub-Divisions.**

Recurring	... Rs.	2,74,000	Non-recurring	... Rs.	Nil.
Total	... ,,	2,74,000	Ultimate annual cost	,,	54,800

Remarks.—The areas and responsibilities of the existing Banaskantha and Chhota-Udepur Sub-Divisions are more or less on par with any of the Forest Divisions in the State. These Sub-Divisions can be managed more efficiently if they are raised to the status of Divisions.

It is found that the area of the Northern Circle is not equitably distributed and also that some of the Divisions are heavily worked. It is therefore necessary to group the areas into manageable units for attaining efficient administration. It is accordingly proposed to convert the Sub-Divisions into Divisions and to regroup the Divisions in the Northern Circle into the following units :—

Divisions.—Panch-Mahals, Baria, Chhota-Udepur, Rajpipla and Banaskantha.

Sub-Division.—Sabarkantha.

The existing Chhota-Udepaur and Banaskantha Sub-Divisions are proposed to be raised to the status of Divisions.

SCHEME No. 64.

Name of the Scheme.—**Intensification of checking forest produce in transit.**

Recurring	... Rs.	2,38,737	Non-recurring	... Rs.	88,470
Total	... ,,	3,27,207	Ultimate annual recurring.	,,	47,750

Remarks.—On account of transport of forest produce by fast moving vehicles, checking of illicit transport has been found difficult. In order to have an effective check on the transport of forest produce, additional Check Nakas and additional staff for day and night checkings are necessary. The Scheme, would put a stop altogether to illicit traffic which will result in tremendous saving by preventing distruction of the Forests within the State. It is, therefore, proposed to intensify checking forest produce in transit during the Second Five Year Plan period at an estimated cost Rs. 3,27,207.

SCHEME No. 65.

Name of the Scheme.—**Opening of Regional Foresters' Training Classes.**

Recurring	...	Rs.	1,03,860	Non-recurring	...	Rs.	1,800
Total	...	„	1,05,660	Ultimate annual recurring.		„	20,272

Remarks.—Formerly, there were two Foresters' Training Classes, one in the Northern Circle to train forest subordinates from Northern Circle and Central Circle and the other in the Southern Circle. At present the class in the Southern Circle is closed and only one class is conducted at Bordi in Western Circle which caters to the students from Central Circle, Western Circle, Eastern Circle and Northern Circle. With a view to imparting training in Forestry and also to facilitate instructions in Forestry being given in the three regional languages it is found necessary to have Foresters' Training Classes, one in the Southern Circle at Haliyal for the benefit of Kannada knowing subordinates, and the second at Baroda for the Gujarati knowing subordinates in addition to the existing class at Bordi, which will cater to Marathi knowing subordinates. It is accordingly proposed to open two additional classes during the Second Five-Year Plan peroid.

SCHEME No. 66.

Name of the Scheme.—**Survey of oil bearing trees.**

Recurring	...	Rs.	30,000	Non-recurring	...	Rs.	*Nil*
Total	...	„	30,000	Ultimate annual recurring.		„	6,000

Remarks.—As a part of the main Scheme envisaging the establishment of arboreta of oil bearing plants in different regions of India with a view to studying their various phases of development and their commercial utilisation, an arboretum has been established at Dharwar with the financial aid of the Government of India. During the Second Five-Year Plan, the arboretum at Dharwar is proposed to be continued at a total estimated cost of Rs. 30,000.

The programme under the Scheme consists of :—

(*i*) Collection of seeds of both indigenous and foreign oil bearing trees and growing them in suitable nurseries ;

(*ii*) Planting and maintenance in the arboretum ;

(*iii*) Collection of data regarding growth characteristics, irrigation and other requirements, yield of individual trees and variation in oil percentage in different genera and species ;

(*iv*) Other uses to which they can be put to such as fodder, green leaf manure, fuel, timber, etc.

The Scheme is to be financed entirely by the Government of India.

SCHEME No. 67.

Name of the Scheme.—**Survey of merged States areas.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 5,00,000

Total ... „ 5,00,000 Ultimate annual recurring ... „ *Nil.*

Remarks.—Large tracts of the areas which have merged with Bombay State have not yet been surveyed. In order to bring these unsurveyed areas under a "Working Plan", it is proposed to survey these tracts (in the merged areas of the State) and to carry out mapping work during the Second Five-Year Plan period at an estimated cost of Rs. 5,00,000. The area to be surveyed is estimated to be 500 square miles in Rajpipla.

SCHEME No. 68.

Name of the Scheme.—**Land improvement, anti-erosion and water conservation works.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 4,00,000

Total ... „ 4,00,000 Ultimate annual recurring ... „ *Nil.*

Remarks.—It is proposed to carry out certain trenching and gully-plugging in the upper catchment areas of 40 villages in the Dangs District which are to be taken up for bunding by the Agriculture Department. In order that the bunding works by the Agriculture Department in the lower catchment area may succeed, land improvement work must start in the upper catchment area first. This Scheme is an essential precursor to the Agriculture Department's Scheme of bunding. These measures among other benefits will improve the sub-soil moisture position which in turn will partially help to solve the water problem of the Dangs District. It is proposed to cover about 10,000 acres at the rate of 2,000 acres per year in the Dangs District at a total non-recurring cost of Rs. 4,00,000.

SCHEME No. 69.

Name of the Scheme.—**Opening of Soil Conservation Demonstration Centres.**

Recurring ... Rs. 1,54,080 Non-recurring ... Rs. 1,87,420

Total ... „ 3,41,500 Ultimate annual recurring ... „ *Nil.*

Remarks.—With a view to demonstrating to the villagers and the public at large the utility of Soil Conservation and afforestation work, it is desirable to create demonstration plots in the vicinity of towns. Besides, the Demonstration Centres are proposed to be set up with the following objectives :—

(*i*) to check the soil erosion;

(*ii*) to increase the moisture contents of the sub-soil by arresting surface run-off and conserving moisture;

(*iii*) to increase the supply of fire wood and to improve pasture by introducing better quality of fodder grass and legumes; and

(*iv*) to produce raw material for cottage industries such as Sisal, rope-making, bamboos for basket making and mat making, etc.

To start with, it is proposed to have one such plot in each Division of about 100 acres in extent—50 acres to be used for soil conservation and afforestation work and 50 acres for control purposes, during the Second Five-Year Plan period. It is also proposed to undertake pilot schemes at an estimated cost of Rs. 76,484 with the assistance from the Government of India to the extent of 50 per cent. of the cost. The work will be carried out in an area of 612 acres in 3 plots—one each at Kathala in Baria Division, at Nandgaon in East Khandesh Division and at Rayapur in Dharwar Division.

Details of the cost of the Scheme are as follows:—

3 Pilot Schemes.—

	Rs.
Recurring	17,280
Non-recurring	69,204
Ultimate annual recurring	*Nil.*
Total	76,484
Share of the Government of India ...	38,242
Share of State Government	38,242

SCHEME No. 70.

Name of the Scheme.—**Soil Conservation Scheme for Ratnagiri District.**

Recurring ...	Rs.	2,50,000	Non-recurring ...	Rs.	12,50,000
Total ...	„	15,00,000	Ultimate annual recurring ...	„	2,00,000

Remarks.—Most of the tree-growth on the hill slopes of Ratnagiri District has disappeared resulting in very heavy soil erosion which may result in the area becoming unproductive. In order to arrest further damage due to Soil erosion, it is proposed to afforest the denuded hill-slopes of Ratnagiri District during the Second Five-Year Plan to the extent of roughly 22,324 acres at an estimated cost of Rs. 15,00,000. The Scheme involves not only afforestation but also acquisition of private lands for the purpose of afforestation.

SCHEME No. 71.

Name of the Scheme.—**Afforestation of Arid and Blank areas.**

Recurring ...	Rs.	12,00,000	Non-recurring ...	Rs.	41,52,000
Total ...	„	53,52,000	Ultimate annual cost ...	„	5,00,000

Remarks.—Due to continued maltreatment of forest blanks by agricultural population large tracts have become completely depleted of forest cover with the result that soil is in the process of disappearing and the areas are likely to become completely barren and unfit for the growth of any vegetation whatsoever. With the growing population a balanced land utility is absolutely essential. It has been generally appreciated that 33⅓ per cent. of the total land area must remain under forests if the agricultural economy is to be maintained and the climatic condidions suitable to maintain the fertility of the land have to be established. Timber is required both in peace and war. Fuel is needed at all times. Grazing is required to meet the requirements of the plough bullocks and the milch cattle for the supply of milk. In this State, only 17 per cent. of the land area is under forests, the actual area under tree being much smaller because such of the forest land is devoid of tree-growth. The shortage of fuel and grazing is being felt in almost all the districts of the State and many districts due to depletion of tree-growth and consequently lack of forests has become vulnerable to famines. In order, therefore, to minimise the risk of the famines and to conserve the cow-dung for manure, it is necessary to reclothe the arid and blank areas in as short a period as possible. This is a general Scheme in which various afforestation schemes are grouped together with a view to covering areas such as the barren lands of the Deccan Plateau and Ahmednagar, Sholapur, Poona, Bijapur Districts, etc. A provision of Rs. 53,52,000 is, therefore, made in the Second Five-Year Plan for carrying out afforestation work in an area of about 80,575 acres.

SCHEME No. 72.

Name of the Scheme.—**Afforestation and Rehabilitation of pasture lands.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	38,33,000
Total	... „	38,33,000	Ultimate annual recurring	„	*Nil.*

Remarks.—The Scheme envisages improvement of pasture and Kuran areas in Nasik, Thana, East Khandesh, West Khandesh, Poona, Kolhapur, North Satara, Kolaba, Sholapur and Ahmednagar Districts. Acute shortage of fodder and grass is often felt all over the State and particularly in Khandesh areas where rainfall is below normal. To meet the additional demand during the years of scarcity or famine, " Kuran " or special pastures have been created and they are meant to provide cut fodder. But as most of these are not fenced, heavy illicit grazing takes place and as a result, the forage capacity has become reduced. It is, therefore, proposed to attempt rehabilitation of the Kurans by improving yield of grass by soil conservation measures such as contour-trenching, gully-plugging and planting fodder trees, mainly Anjan, Siras, Sisoo, to a moderate extent so as to hinder the production of grass, to any serious extent. Fencing of Kurans will also enhance their marketable value.

It is proposed to rehabilitate an approximate area of 52,768 acres at an estimated cost of Rs. 38,33,000 in the Districts mentioned above.

SCHEME No. 73.

Name of the Scheme.—**Planting of Agave hedges.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	6,40,000
Total	... „	6,40,000	Ultimate annual recurring	„	*Nil.*

Remarks.—The Scheme envisages planting of Agave hedges in strips of 3 feet along the forest boundaries of Kurans, fire lines and demarcation lines throughout the State.

Apart from the yields of coarse fibre from Agave hedges which are useful for cordage and other purposes these hedges serve as a very efficient fire belt which prevents waste of forest lands caused by burning wide fire lines as during the fair season, large quantities of teak leaves cover the burnt ground and render the wide fire lines ineffective. To keep the fire lines clear these leaves have to be repeatedly reburnt at heavy costs. Moreover, planting of hedges with Agave, besides being much cheaper in the long run, is necessary to define clearly forest boundaries and to prevent encroachments and illicit grazing.

During the Second Five-Year Plan period it is proposed to plant a length of 3,200 miles at an estimated cost of Rs. 6,40,000.

SCHEME No. 74.

Name of the Scheme.—**Forest Rehabilitation Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	7,67,000
Total	... „	7,67,000	Ultimate annual recurring	„	*Nil.*

Remarks.—The Scheme envisages enumeration and revision of plans on yield basis to compensate for excess timber taken out for War supply and also for the preparation of new Working Plans for the areas which have merged in the State. Forest areas proposed to be covered during the Second Five-Year Plan period under this Scheme are in North Kanara, Dharwar, Bijapur, Surat, Nasik and Baroda Districts. The Scheme provides for the preparation of six new Working Plans and revision of 19 Working Plans in the forest areas of the districts mentioned above.

SCHEME No. 75.

Name of the Scheme.—**Immobilization of the Runn of Kutch.**

Recurring	... Rs.	5,71,000	Non-recurring	... Rs.	3,00,000
Total	... „	8,71,000	Ultimate annual recurring.	„	1,14,200

Remarks.—The desert conditions are advancing in the Northern parts of the Bombay State and unless checked, much of the cultivable lands would become unsuitable for agricultural cultivation. The problem of immobilization of Kutch Desert requires immediate attention. It is, therefore, proposed to stem the advance of the desert which would otherwise cover an area of 20,000 miles of afforestation of (*a*) 26,000 acres of waste lands, (*b*) 5,600 acres of strip bordering the desert line, (*c*) 112 miles of existing road sides and 84 miles of Nalla and river banks, and (*d*) 2,240 acres of denuded hills in the Northern part of Gujarat particularly those parts of Banaskantha, Sabarkantha and Ahmedabad Districts which lie close to the Runn of Kutch.

A programme for a period of seven years has been drawn. During the Second Five-Year Plan a provision of Rs. 8,71,000 has been proposed.

SCHEME No. 76.

Name of the Scheme.—**Rehabilitation of Forest area with teak where Bamboo flowering is imminent.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,00,000
Total	... ,,	4,00,000	Ultimate annual cost.	,,	*Nil.*

Remarks.—The Southern Circle of Bombay State has very valuable forests having several tree species and covering an area of roughly 800 square miles. These forests have also large stretches of young plantations of teak (24,803 acres) raised at a great expense for the last 30 years. A peculiar physiological phenomenon of flowering of the bamboos creates abnormal situation periodically in the forests as a result of which far reaching ecological and vegetational changes are brought about in these areas. When floweing starts it spreads like a wave in different directions taking some years to cover the whole area. It is also accompanied by the drying of bamboo clumps. If not protected against fire the dried bamboos when set on fire can create a conflagration which may cause enormous loss of valuable tree growth.

Bamboo flowering is imminent now and will continue over a period of 10 years. It would be necessary, therefore, to strengthen the fire protection measures where flowering takes place and also to take advantage to enrich the forest area as far as possible by introducing Teak either by seed sowing or by stump planting. These measures are proposed to be undertaken during the Second Five-Year Plan period at an estimated cost of Rs. 4,00,000.

SCHEME No. 77.

Name of the Scheme.—**Propagation of Bamboos.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,973
Total	... ,,	4,973	Ultimate annual cost .	,,	*Nil.*

Remarks.—Under this Scheme, it is proposed to try a special variety of bamboos on experimental basis in the neighbourhood of towns and cities in 17 Forest Divisions in an area of 170 acres in all. This will help to start cottage industries in the Districts of Dharwar, Belgaum, Thana, Kolaba, Kolhapur, Kanara, Bijapur, East and West Khandesh, Panchmahals, Banaskantha, Sabarkantha, Poona and Satara North. The work will be supervised by the existing staff.

SCHEME No. 78.

Name of the Scheme.—**Aerial Ropeway.**

Recurring	... Rs.	16,000	Non-recurring	... Rs.	3,84,000
Total	...	4,00,000	Ultimate annual cost	,,	20,000

Remarks.—There are large tracts of inexploitable forests in North Kanara District from where timber is at present hauled by what is known as skidding operation. In some cases however the skidding equipment is not adequate and valuable material both Teak and non-Teak remains to be hauled. It is, therefore, proposed during the Second Five-Year Plan period, to explore the possibility of constructing the Aerial Ropeway for the Nagzari valley to facilitate hauling of timber which is at present being wasted in site.

SCHEME No. 79.

Name of the Scheme.—**Scheme regarding Matchwood Plantation.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 4,33,000

Total ... „ 4,33,000 Ultimate annual recurring ... „ *Nil.*

Remarks.—There are several match factories in the State which require softwood for matches. The match factories in the Bombay State are unable to obtain their requirements within the State. The bulk of the timber has in the past been imported from Assam and Andamans involving heavy transport charges. The Scheme is, therefore, designed to raise plantation of softwood species principally Sawar—*Bombax Malabaricum* which provide suitable matchwood timber for manufacture of boxes and splints. In the Second Five-Year Plan Sawar-planting is proposed to be undertaken only in those areas containing large blanks and sparsely wooded parts wherein planting teak and other valuable hardwood species is not considered worthwhile. An area of about 3,400 acres is expected to be brought under the matchwood plantations in West Khandesh, North Khandesh, East Khandesh, Surat, Vyara and Kolaba Divisions under this scheme. It is also proposed to carry out silvicultural operations in an approximate area of 785 acres already taken up in 1955-56. The estimated cost of the Scheme is Rs. 4,33,000 at Rs. 117 per acre. The Government of India are anxious to encourage plantations of matchwood timber and it is proposed to approach the Government of India with a request to bear 50 per cent. cost of the Scheme.

SCHEME No. 80.

Name of the Scheme.—**Establishment of Permanent Wet Nurseries.**

Recurring ... Rs. 15,00,000 Non-recurring ... Rs. *Nil.*

Total „ 15,00,000 Ultimate annual recurring „ 3,00,000

Remarks.—The Scheme involves the establishment and maintenance of 172 permanent wet nurseries for raising forest species and fruit seedlings in each Range with the object of creating a net-work of nurseries for providing robust seedlings for transplanting and stump plantings in exploited coupes. One of the main difficulties in ensurnig the success of Vana-Mahotsava has been the supply of poor quality seedlings raised in small dry nurseries scattered all over the District. In order, therefore, to ensure a permanent and good quality supply of seedlings for the various forest development works and national tree planting occasions establishment of permanent wet nurseries is considered to be essential. It is accordingly proposed to establish 172 permanent wet nurseries at the rate of 1 nursery in each Range.

SCHEME No. 81.

Name of the Scheme.—**Installation of walkie-talkie wireless sets.**

Recurring ...	Rs. 6,33,000	Non recurring ...	Rs. 1,37,000
Total ...	,, 7,70,000	Ultimate annual recurring ...	,, 90,000

Remarks.—In order to keep a constant watch for locating fires and to transmit information regarding the occurrence of fires in the forest areas particularly in Kanara and Dangs so that timely action is taken to prevent the fires developing into conflagration and to prevent the resulting heavy losses, it is considered necessary to instal three static and one mobile wireless sets in each of the two Divisions at strategic places on the boundary of the Dangs Division at places like Dandeli, Kulgi or Virnoli and Gund in the Kanara Northern Division. These sets are also expected to be useful in increasing the efficiency of the Departmental working.

SCHEME No. 82.

Name of the Scheme.—**Intensification of demonstration of the methods of lac cultivation.**

Recurring ...	Rs. 2,83,057 ...	Non-recurring ...	Rs. *Nil*
Total ...	,, 2,83,057	Ultimate annual recurring ...	,, *Nil*

Remarks.—The main object of the Scheme is to introduce scientific methods of lac cultivation for increased production and better quality of lac, by demonstrating the benefits of these methods on the villagers' own trees. This will also allow the cultivators to earn extra income which would help to improve their condition of living. Lac cultivation is proposed to be carried out on host trees such as Palas, Kusum, Khair and Tiwas which grow abundantly in Dangs District and in Banas kantha District. Each year about 5,000 trees are proposed to be infested. Subir, Galakund and Pimpri Ranges of Dangs Division and some areas of Banaskantha District are proposed to be taken up in the first instance. The Scheme will be continued in Baria, Chhota Udepur, Dangs, Khandesh, Nasik, Belgaum and Poona.

SCHEME No. 83.

Name of the Scheme.—**Cultivation of Medicinal plants.**

Recurring ...	Rs. 55,200	Non-recurring ...	Rs. 7,200
Total ...	,, 62,400	Ultimate annual recurring.	,, *Nil*

Remarks.—A large number of medicinal plants grow naturally in the forests of Bombay State, scattered over large tracts of remote forests thus rendering collection in most cases an uneconomical proposition. It is, therefore, obligatory to undertake cultivation of medicinal plant materials in concentrated areas for making widespread use of Ayurvedic Vanaspati medicines a reality. Research work and small scale trials are contemplated in the artificial propagation of the medicinal plants and investigations regarding the yield of the potent medicinal product before undertaking large scale cultivation. Cultivation is proposed to be undertaken at Nawapur, Shahapur, Matheran, Poona, Mahableshwar, Panchgani, Badami, Haliyal, Dandeli Waghai, Raipipla, Mount Abu, etc. The Scheme will result mainly in rendering easy collection of the medicinal plants at concentrated places and supply of genuine correctly identified drugs, unadulterated with any spurious and injurious ones.

SCHEME No. 84.

Name of the Scheme.—**Restarting of Waghai Saw Mill.**

Recurring	... Rs.	2,00,000	Non-recurring	... Rs.	59,600
Total	... ,,	2,59,600	Ultimate annual recurring.	,,	40,100

Remarks.—It is proposed to restart the Saw Mill in the District of Dangs with a view to sawing (1) defective timber which does not sell profitably and market it in the most advantageous manner after converting it into suitable sawn sizes. (2) Haldu and Kalam blanks and at a later stage Bheda, and (3) Sleepers if possible. The Mill is expected to fetch an annual profit of Rs. 60,000 and further to help promote the industrialisation of the backward tract of the Dangs District.

SCHEME No. 85.

Name of the Scheme.—**Teak Plantation.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	8,40,000
Total	... ,,	8,40,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—During the Second World War excessive fellings were carried out to meet the Defence requirements. If no efforts are taken to raise large scale plantations the supply of timber and other forest produce on sustained basis is likely to be adversely affected in the future. It is necessary to raise large scale plantations of Teak which are essentially required for the Defence Department in order to meet any emergent requirements. It is, therefore, proposed during the Second Plan period to raise special teak plantations in about 5,600 acres as shown below :—

District	Acres
Kanara	1,600
Khandesh	2,000
Dangs	2,000

The cost of the Scheme is estimated to be Rs. 8,40,000 at Rs. 150 per acre (approximately).

SCHEME No. 86.

Name of the Scheme.—**Communications.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	12,50,000
Total	... ,,	12,50,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The Scheme envisages construction of new and urgently required forest roads and special repairs to the existing roads damaged excessively. The works proposed under the Scheme when completed will not only help realization of better prices for forest produce but will also make the forest areas easily accessible and facilitate extraction of timber and other forest produce which is expected to bring in considerable additional revenue to Government. Construction of new roads and special repairs in the forest areas of East, West and North Thana Divisions, East and West Nasik Divisions, East, West and North Khandesh Divisions are proposed to be carried out during the Second Five Year Plan period at a total cost of Rs. 12,50,000. The works will include construction of new roads, metalling of and special repairs to existing roads and construction of causeways, low level dips, Hume pipe drains and culverts.

SCHEME No. 87.

Name of the Scheme.—**Forest Buildings and wells.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	14,00,000
Total	... „	14,00,000	Ultimate annual recurring.	„	*Nil*

Remarks.—Most of the forest subordinates are required to stay in out of the way and unhealthy places in the interior of forests and they are put to much inconvenience for want of suitable accommodation for living at reasonable rent. It is, therefore, considered necessary to provide suitable accommodation to the subordinates in all places where there is scarcity of suitable accommodation on hire. It is accordingly proposed to construct quarters for the Forest staff in the Second Five Year Plan.

Similarly, much inconvenience is felt by Forest subordinates in fetching water for want of wells. It is, therefore, proposed to construct wells at suitable places for the benefit of the Forest staff.

The provisions of housing and water facilities are essential for improving the efficiency of the staff. A total provision of Rs. 14 lakhs is, therefore, made under the Plan.

SCHEME No. 88.

Name of the Scheme.—**Village Forest Panchayat Scheme.**

Recurring	... Rs.	4,00,000	Non-recurring	... Rs.	*Nil*
Total	... „	4,00,000	Ultimate annual recurring.	„	*Nil*

Remarks.—The villagers are at present finding it difficult to secure wood for their fuel requirements and grazing for their cattle apparently because there are no forest areas in the neighbourhood and particularly because the revenue waste areas are not protected against heavy grazing. In order to enable the villagers to conserve cowdung for manurial purpose it is necessary to create village woodlands. The scheme provides for the creation of woodlands and improvement of grass lands in each Community Development Block and National Extension Service area on the assumption that there would be one woodland to one grazing area in each of the Blocks. The total cost of the scheme is estimated to be approximately Rs. 84 lakhs, out of which a sum of Rs. 40 lakhs is expected to be provided under the Community Development Project/National Extension Service funds for the works. Villagers are expected to contribute Rs. 40 lakhs. As the Community Development Projects funds do not provide for the staff for execution of the work the remaining amount of Rs. 4 lakhs is provided for the Scheme to engage the staff wherever necessary.

Scheme No. 89.

Name of the Scheme.—**Establishment of new sanctuaries and improvement to the existing Sanctuary for preservation of wild life.**

Recurring	... Rs.	2,50,000	Non-recurring	... Rs.	2,50,000
Total	... „	5,00,000	Ultimate annual recurring.	„	50,000

Remarks.—The Wild Life wealth of the Nation, as also of the State has been greatly diminished and certain important species are on the verge of extinction. The urgent need for the protection and preservation of the vanishing national asset has been recognised and this purpose can be best achieved by the establishment of sanctuaries and protected areas, wherever possible. Government has already sanctioned the establishment of the Dandeli Sanctuary.

During the period of the Second Five Year Plan it is proposed to provide extra lodging arrangements, roads and staff of the Sanctuary at Dandeli. It is also proposed to make boating arrangements and provide motor vehicles and also to make provision for some other miscellaneous expenditure in connection with the improvement of the Dandeli Sanctuary. The estimated cost for this purpose during the Five Year period is Rs. 2,00,000 (Rs. 1,00,000 recurring and Rs. 1,00,000 non-recurring) out of which an assistance to the extent of Rs. 1,30,000 by way of grants is expected to be received from the Government of India. The share of cost to the State Government would, therefore, be Rs. 70,000 only. The ultimate annual recurring expenditure will be Rs. 20,000.

It is further proposed to expand this activity by establishing during the period of the Second Five Year Plan roughly 9 small sanctuaries and protected areas in certain parts of the State. The estimated expenditure on these sanctuaries is Rs. 3,00,000 (Rs. 1,50,000 recurring and Rs. 1,50,000 non-recurring) out of which Central assistance by way of grants to the extent of Rs. 1,20,000 is expected to be received. The share of the cost to this Government would be only Rs. 1,80,000. The ultimate annual recurring expenditure on these 9 sanctuaries will be Rs. 52,600.

The implementation of this Scheme would not only ensure adequate protection and preservation of the vanishing game species of this State and its natural habitat, but would also help development of tourist traffic from the national point of view.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(Fisheries)

Scheme No. 90.

Name of the Scheme.—**Strengthening of the staff of the Fisheries Department.**

Recurring	... Rs.	2,78,950	Non-recurring	... Rs.	1,050
Total	... „	2,80,000	Ultimate annual recurring.	„	55,790

Remarks.—It is necessary to make provision for additionl staff in the Fisheries Department for its ever increasing activities particularly in the Plan period. A rough outline of the requirement is as shown below :—

(*a*) It has not been possible to make much headway in assessing the progress made by the Fisheries Department and in implementing the recommendations made from time to time by the Government of India in respect of collection of fishery statistics, due mainly to want of requisite staff for the purpose. An economic survey of the fishing industry, which has made considerable progress in recent years, is also urgent. Statistical data is often required by the Universities, the Government of India and other Departments of this Government. It is, therefore, proposed to open a statistical section attached to the Fisheries Department.

(*b*) The merger of the ex-State of Janjira in this District has increased the scope of development of the fishing industry in that District. The fishermen here are considerably backward as compared to their counterparts in the North of Bombay and it is necessary that they should be made alive to the changes in the industry during recent times. It is also necessary to survey the coast, provide port facilities and arrange for the recovery of Government loans amounting at present to about Rs. 5,30,392. It is, therefore, necessary to establish a fisheries office in the interest of development of fisheries in Kolaba District.

(*c*) The scheme for mechanisation of indigenous fishing craft is the pivot on which further development hinges. The progress made so far holds out promise of greater expansion. The expanded activities involve additional administrative and accounts work. The Five Year Plan envisages advancement in different directions involving total loans of about Rs. 52,00,000 in addition to the loans of about Rs. 40,00,000 already advanced by Government. Recoveries of these loans have to be carefully watched, which will not be possible without adequate staff including a recovery officer.

(*d*) Activities of the inland fisheries section have also considerably increased. At present, this work is supervised by the Assistant Director of Fisheries in addition to his other regular work. Stocking and inspection of these sheets of fresh water by an independant officer will be necessary with further intensification of stocking operations. The Department has also undertaken deep tank fishing operations. For proper execution of the expanded activities and bringing about co-ordination, it is necessary to revive the post of the Superintendent of Fisheries (Inland) held in abeyance in the past.

The details of staff showing recurring and non-recurring expenditure is set forth in the sub-joined statement.

Statement showing the details of staff required for the scheme "Strengthening of the staff of the Fisheries Department"

A—For Collection of Statistics

Designation	No. of posts	Scale of pay
(*a*) *Statistical*		
1. Statistical Officer Class II Gazetted	1	220—15—400—E.B.—20—500—E.B.—25—650 (Mofussil).
2. Statistical Assistant ..	1	170—10—280—15—340 (City).
3. Clerks (at Ratnagiri, Karwar, Bulsar and Baroda).	4	100—8—140 (Mofussil).

Designation	No. of posts	Scale of pay
4. Statistical Investigators (One each at Ratnagiri, Karwar, Surat, Broach, Baroda, Thana and Head Office at Bombay).	6	85—5—100—8—140—E.B.—10—220 (Mofussil).
5. Clerk-*cum*-typist	1	75—5—140—E.B.—6—200 (City).
6. Peon	1	35—½—40 (City).
(*b*) *Administrative.*		
1. Superintendent of Fisheries (Inland), Class II (Gazetted).	1	220—15—400—E.B.—20—500—E.B.—25—650 (Mofussil).
2. Junior Superintendent (Loans and Accounts).	1	250—10—300—15—345 (City).
3. Junior Superintendent (General).	1	250—10—300—15—345 (City).
4. Recovery Officer (City) ..	1	200—10—300 (City).
B—STAFF FOR KOLABA SECTION.		
1. Superintendent of Fisheries, Kolaba, Class II Gazetted.	1	220—15—400—E.B.—20—500—E.B.—25—650 (Mofussil).
2. Clerk-*cum*-typist	1	46—3—85—4—125—5—130.
3. Peon	1	30—½—35 (Mofussil).

SCHEME No. 91.

Name of the Scheme.—**Demonstration of mechanised fishing in underdeveloped areas.**

Recurring	.. Rs.	1,54,000	Non-recurring	.. Rs.	89,000
Total	.. ,,	2,43,000	Ultimate annual recurring.	,,	59,325

Remarks.—It is expected that the region to the south of Bombay, particularly Ratnagiri and Karwar areas, will yield better results if the drift nets used by fishermen, made on the same pattern in the north, are used in conjunction with power craft. It is, therefore, necessary to introduce power craft with adequate gear for exploitation of this region. Fishermen of this area, who have not been able to take advantage of Government's programme for mechanisation, will be greatly benefited by the demonstration proposed under the scheme. Local fishermen will be initiated in the operation of nets aboard mechanised vessels so that ultimately they will be attracted towards mechanising their craft and will be convinced of the benefit accruing from the use of modern gear. The scheme will be in operation for three years and will be operated in Ratnagiri, Kanara and Kolaba Districts in consecutive years. For the operation of the scheme, a marine engine worth about Rs. 17,000 will be purchased from abroad. The following staff will have to be appointed viz. :—

	Scale of pay Rs.
One Gear Technician	180—10—300.
One Mechanic Driver	170 per mensem fixed.
One Tindal	120 per mensem fixed.
One Boatman	90 per mensem fixed.

With a view to utilising the monsoon season for the capture of fish, the Naval Architect of the Food and Agricultural Organisation during his stay in Bombay prepared a design of a suitable boat which is estimated to cost Rs. 50,000 inclusive of the cost of the engine of 60 B.H.P. The object underlying the practice of monsoon fishing is to increase the supply of fish when the Bombay markets are practically without fish. Further, fishing during this period would help fishermen to increase their earnings and to utilise this idle period profitably. At present fishermen have to spend their time during the monsoon without any work and have to depend on the savings which are meagre. It is, therefore, proposed to build one boat of this type and hold demonstrations in monsoon fishing. The proposed scheme, if successful, will serve as an incentive to enterprising fishermen on the coast to acquire similar mechanised craft and thus add considerably to their earning capacity. The boat will be operated during fair season for capture of fish with mechanical equipment such as winches, echosounders, etc., and for suggesting fishing methods for idle periods of neap tides. The following staff will have to be appointed for the implementation of this scheme :—

	Scale of pay Rs.
One Mechanic Driver	170 per mensem fixed.
One Gear Technician	180—10—300.
One Tindal	120 per mensem fixed.
One Oilman	90 per mensem fixed.

The total cost of the above proposal is Rs. 2,43,000 out of which Rs. 89,000 is non-recurring and the rest recurring.

SCHEME No. 92.

Name of the Scheme.—**Training of fisher-youths as mechanics on mechanised craft.**

Recurring	... Rs.	80,290	Non-recurring	... Rs.	1,000
Total	... „	81,000	Ultimate annual recurring.	„	*Nil*

Remarks.—With the mechanisation of the fishing craft, trained staff must also be made available not only to man the fishing vessels but also to look after the engines. The pace of mechanisation is so rapid that properly trained staff is not available to take charge of the engines. Unless suitably trained staff is made available from the fishing community and they are acquainted with the latest methods in mechanised fishing the trade will not be self-contained or economic. It is, therefore, necessary to train fisher-youths in handling and servicing the engines so that on completion of their courses they may be useful to man their fishing vessels and look after the engines in a proper manner. It is proposed to train 30 fisher-youths over a period of three years. The candidates will receive a stipend at the rate of Rs. 50 per mensem and food allowance at Rs. 15 per mensem.

The total cost involved in the above proposal is about Rs. 81,000 out of which Rs. 1,000 is non-recurring and the rest recurring. Details of the staff etc., are as under :—

Designation	No. of posts	Scale of pay
		Rs.
1. Gear Technician ..		200—10—300.
2. Administrative Officer ..	1	150—10—200.
3. Shore Attendant ..	1	90 per mensem fixed.
4. Instructor	1	200—10—300.
5. Peon	1	30—½—35.

SCHEME No. 93.

Name of the Scheme.—**Establishment of Marine Biological Research Station at Ratnagiri and intensification of Marine Biological Research Facilities at the Taraporevala Aquarium, Bombay.**

Recurring	.. Rs. 1,73,326	Non-recurring	.. Rs. 2,44,674
Total	.. ,, 4,18,000	Ultimate annaul recurring	,, 34,665

Remarks.—Scientific development of fisheries of any area is impossible without a thorough knowledge of its seas and their fish fauna. A comprehensive knowledge of the life histories of important food fishes available in the locality, their spawning grounds, feeding habits, seasonal migration brought about by such factors as the changes in the planktonic food, the chemical nature of waters and the population studies of different groups of fish helps judicious exploitation of fishery resources. With this object in view, it is proposed to establish a Marine biological research station at Ratnagiri and also to intensify such research facilities at the Marine Biological Research Station attached to the Taraporevala Aquarium in Bombay. Land for the Research Station at Ratnagiri has already been acquired and construction has been undertaken since 1955-56. As the building is expected to be ready before the Second Plan period the Research Station will start functioning from the first year of the Second Plan.

The following staff will have to be appointed at the two Research Stations at Bombay and Ratnagiri :—

(A) *At Ratnagiri*

	Designation	Number of posts	Scale of pay Rs.
1.	Curator (Gazetted)	1	220—15—400—E.B.—20—500—25—650 (Mofussil).
2.	Senior Research Assistant	1	140—10—250.
3.	Junior Research Assistant	1	100—8—180.
4.	Laboratory Assistant	1	46—3—85—4—125—5—130.
5.	Clerk-cum-typist	1	46—3—85—4—125—5—130.
6.	Peons	2	30—½—35.
7.	Watchman	1	30—½—35.
8.	Field Collectors	2	30—½—35.
9.	Mechanic	1	60—4—100.
10.	Tank Attendants	2	35—1—40.

(B) *At Bombay*

	Designation	No. of posts	Scale of pay Rs.
1.	Research Officer (Gazetted) (Higher initial salary of Rs. 500 p.m.).	1	350—30—650—E.B.—45—1,100 (Mofussil).
2.	Biologist (Higher initial salary of Rs. 250 p.m.).	1	200—10—300—15—450. (Mofussil).
3.	Biochemist (Higher initial salary of Rs. 250 p.m.).	1	200—10—300—15—450. (Mofussil).
4.	Peon to the Research Officer.	1	35—½—40 (City).
5.	Mechanic Driver	1	170 fixed per mensem (City).
6.	Tindal	1	120 (fixed).
7.	Boatman	1	90 per mensem fixed.

SCHEME No. 94.

Name of the Scheme.—**Extension of the Fisheries Technological Laboratory and manufacture of Shark Liver Oil with malt extract.**

Recurring ... Rs. 2,40,800 Non-recurring ... Rs. 1,03,200

Total ... „ 3,44,000 Ultimate annual recurring ... „ 48,160

Remarks.—**There is a great demand for Shark Liver Oil with malt extract as it can be consumed without the nausea that at times makes plain fish liver oil repellant to taste. Its palatability has a special appeal to children. This will be evident** from the large imports of Kepler's and other foreign malt extract preparations with Cod Liver Oil. Shark Liver Oil with malt extract is, therefore, bound to prove popular. Messrs. Kemp and Company, the Fisheries Department's sole distributors for sale of its Shark Liver Oil products have assured an annual sale of Rs. 75,000. Besides, the Defence Department also consumes a large quantity of Shark Liver Oil. On the basis of successful experiments for its manufacture conducted at the Fisheries Technological Laboratory, it is, therefore, proposed to take up the scheme for preparation of 20,000 lbs. of Shark Liver Oil with malt extract per annum. Besides saving the country a large expenditutre on imports of foreign preparations, the new product will augment the consumption and popularise Indian Shark Liver Oil.

The present accommodation at the laboratory is not sufficient even to permit the manufacture of Shark Liver Oil products on a large scale. For manufacture of malt extract with Shark Liver Oil, it is, therefore, necessary to provide extension to the main building of the Technological Laboratory. The cost of providing the extension is estimated at Rs. 73,000 ; equipment to the extent of Rs. 13,200 will also have to be purchased.

The following staff will be required for the operation of the scheme :—

1. Assistant Director (1) in Gazetted Class I cadre in the scale of Rs. 350—30—650—E.B.—45—1,100 (Mofussil).
2. Supervisor (1) in the scale of Rs. 105—5—155 (City).
3. Junior Clerk (1) in the scale of Rs. 75—5—140—E.B.—6—200 (City).
4. Mazdoors (3) in the scale of Rs. 35—½—40.

It is estimated that the total receipts on account of sale of Shark Liver Oil with malt extract will amount to Rs. 3,37,500 by selling the product at Rs. 3-6-0 per lb. The gross profit on the scheme is Rs. 2,910 annually. The scheme is thus self-sufficient.

The cost involved in the above proposal is Rs. 3,44,000 out of which Rs. 1,03,200 is non-recurring and the rest recurring.

SCHEME No. 95.

Name of the Scheme.—**Extension of the Taraporevala Aquarium Building.**

Recurring	...	Rs.	*Nil.*	Non-recurring	... Rs.	80,000
Total	...	,,	80,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The Fisheries Department at present is experiencing acute shortage of space. The entire office is housed in the hall on the 1st floor of the Taraporewala Aquarium at Bombay. With the intensification of Research at Bombay and the proposed expansion, there will be practically no room to house additional staff. There is also no space for upkeep of office records. The present congestion can be relieved to some extent only when additional extension is put up at the Taraporevala Aquarium building. It is, therefore proposed to extend the present aquarium building to meet the Department's immediate requirements for housing the staff and make more room available for research purposes.

SCHEME No. 96.

Name of the Scheme.—**Establishment of fish farms at Poona, Nasik and other centres.**

Recurring	... Rs.	72,800	Non-recurring	... Rs.	5,58,200
Total	... ,,	6,31,000	Ultimate annual recurring.	,,	14,560

Remarks.—Under the scheme, it is proposed to establish fish farms at Nasik, Baroda, Poona and Dharwar or other suitable centres in the State for demonstration of scientific is piscicultural methods. These farms, which will have both nursery and stocking tanks, will serve as composite units for observations on the breeding of various exotic and indigenous fish, their rare of growth, their adaptability to various environments and their optimum food requirements in different regions of the State under controlled conditions. The data so collected will be very valuable and obviate indiscriminate introduction of fish in inland waters. The work of the fish farm at Poona is proposed to be undertaken during the first year and is likely to be completed by the end of the second year of the Plan period. Staff at this farm will be appointed during the third year. The work on the remaining farms will be undertaken during the second year of the Plan period and will be completed by the end of the third year. The staff on these farms will be appointed during the fourth year of the Plan period.

The following staff will be appointed under this scheme :—

Designation.	No. of posts	Scale of pay Rs.
1. Assistant Superintendents of Fisheries.	4	120—8—160—10—230. (Mofussil).
2. Watchmen ...	8	30—½—35 (Mofussil).
3. Senior Fieldman ...	1	61—3—85 (Mofussil).
4. Junior Fieldmen ...	8	35—½—40 (Mofussil).

SCHEME No. 97.

Name of the Scheme.—**Stocking of inland waters with carp-fry.**

Recurring	... Rs.	1,11,500	Non recurring	... Rs.	6,500
Total	... ,,	1,18,000	Ultimate annual recurring.	,,	22,300

Remarks.—Experiments in fattening of fry of select varieties of fish such as Catla, Rohu, Mirgal, especially imported from Calcutta, have proved most promising from the point of view of increased production of fish. It is, therefore, proposed to stock every year various sheets of water in this State with rapidly growing varieties of carp-fry from West Bengal as well as from local sources and market them when they attain full size. Fish will be made available to consumers in the interior on a large scale thus opening a venue for useful employment to local people.

In addition to the existing staff in the districts, the following staff will have to be appointed under this scheme :—

Designation	No. of posts	Scale of pay Rs.
1. Assistant Superintendent of Fisheries.	1	120—8—160—10—230 (Mofussil.)
2. Watchmen (Bombay) ...	4	35—½—40.
3. Watchmen (Mofussil) ...	4	30—½—35.

The total cost of the scheme is Rs. 1,18,000 out of which Rs. 6,500 is non-recurring and the rest is recurring. Central assistance to the extent of 50 per cent. of the cost of the scheme, viz. Rs. 59,000 is anticipated.

SCHEME No. 98.

Name of the Scheme.— **Development of Fisheries in deep tanks.**

Recurring ...	Rs. 1,19,010	Non-recurring ...	Rs. 51,990
Total ...	,, 1,71,000	Ultimate annual recurring.	,, 23,802

Remarks.—With a view to developing fisheries in deep tanks, it is proposed to stock extensive irrigation reserviors such as Lake Fife, Bhatghar Dam in Poona District and several other deep tanks in Kolhapur and Dharwar districts with rapidly growing varieties of fish. The aforesaid sheets of water being vast in area and several feet in depth, special methods have to be adopted for capture of fish liberated therein. It is, therefore, proposed to initiate schemes for stocking and fishing these tanks at Kolhapur, Poona and Dharwar. The scheme has already been started during the year 1955-56, which will be continued further. The provision during the Plan Period has, however, been enhanced for proper implementation of the scheme.

The following staff will be required :—

Designation	No. of posts	Scale of pay Rs.
1. Assistant Superintendent of Fisheries.	3	120—8—160—10—230 (Mofussil)
2. Fieldmen ...	6	30—½—35.
3. Watchmen ...	3	30—½—35.
4. Peons ...	3	30—½—35.
5. Junior Clerk ...	1	75—5—140—E.B.—6—200 (City)

The total cost of the scheme is Rs. 1,71,000, out of which Rs. 51,990 is non-recurring and the rest is recurring.

SCHEME No. 99.

Name of the Scheme.—**Mechanization of fishing craft and introduction of mechanized equipment including allotment of boats on loan-cum-subsidy basis.**

Recurring	... Rs.	6,500	Non-recurring	... Rs.	27,84,500 (inclusive of loan).
Total	... ,,	27,91,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—Mechanisation of indigenous fishing craft has helped considerably in increasing the supplies of fish. In order to provide further impetus to the progress already achieved it is proposed to allot 45 engines during the first year and thereafter 40 engines every year to groups of fishermen in this State on the basis of 50 per cent. subsidy and 50 per cent. loan.

It is also proposed to make financial assistance available to fishermen in this State excepting those in the Thana and Greater Bombay districts, on the basis of 1/4th subsidy and 3/4th loan on the estimated cost of Rs. 5,000 for each boat. The programme for allotment of boats will be as under :—

1st year	... ...	*Nil.* Nos.
2nd year	... ...	30 ,,
3rd year	... ...	30 ,,
4th year	... ...	30 ,,
5th year	... ...	30 ,,
		120 Nos.

The two winches purchased by Government are being installed aboard mechanised boats at Satpati, District Thana. Use of the winches installed at the Fisheries Training Centre, Satpati being conducted under the aegis of the Government of India, the Saurashtra and Bombay Governments, has proved helpful in operating longer nets with fewer hands, thus ultimately increasing total production of fish. It is, therefore, proposed to purchase under this scheme five winches every year and allot them to fishermen owners of mechanized craft on the basis of 1/3rd subsidy and 2/3rd loan. Each winch is estimated to cost Rs. 1,000.

Echo-sounders are now invariably used by fishermen in the West and in the U. S. A. as they help in the location of fish shoals and also in recording the depth of the sea. Their utility in capture of fish is well recognised in the Western countries. It is, therefore, proposed to secure an echo-sounder through the Technical Co-operation Mission programme for undertaking demonstrations departmentally for information of fishermen. The cost involved in the proposal is Rs. 8,800 out of which an amount of Rs. 6,500 represents recurring expenditure on account of the operator and the remaining nonrecurring expenditure on account of cost of the generator and other equipment for the echo-sounder.

The details of expenditure involved in each of the items in the scheme are as under :—

	Rs.	Rs.
(1) Cost of 211 engines (out of which one will be low H.P.)...		21,57,000
Subsidy	10,78,500	
Loan	10,78,500	
(2) Cost of 120 boats—		6,00,000
Subsidy	1,50,000	
Loan	4,50,000	
(3) Cost of 25 winches—		25,000
Subsidy	8,333	
Loan	16,667	
(4) Expenditure on the demonstration of echo-sounder—		9,000
Recurring	6,500	
Non-recurring	2,500	

Scheme No. 100.

Name of the Scheme.—**Establishment of Ice and Cold Storage Plants at important centres along the coast and development of marketing of fish in hinterlands.**

Recurring ...	Rs.	1,008	Non-recurring ...	Rs.	2,33,000 (inclusive of loan).
Total ...	,,	2,34,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—Provision of adequate refrigeration facilities is essential to enable fishermen to preserve their catches in good condition and to regulate supply of fish to the market. With this end in view, it is proposed to establish two ice and cold storage factories at Malwan and Karwar respectively. The ice plants are proposed to be made available to fishermen's co-operative societies on 1/3rd subsidy and 2/3rd loan basis, especially in the Ratnagiri and Kanara districts where such facilities are lacking for the trade.

In order to give an effective impetus to marketing of fish in the interior, provision of freezers is also essential, for preservation of unsold stock of fish so as to regulate supply. It is accordingly proposed to purchase 7 deep freezers at a total cost of Rs. 31,500.

The freezers will be allotted to fishermen's co-operatives societies who desire to establish fish stalls at the market places at Baroda, Ahmednagar, Dharwar, Sholapur, Karad, Dhulia and Kolhapur. They will be allotted on the basis of 1/3rd subsidy (i.e. Rs. 1,500) and 2/3rd loan (Rs. 3,000), the loan being repayable within a period of three years. It is also proposed to grant the societies a subsidy to the extent of half of the rent of these stalls for the first six months, the monthly rent of each stall being Rs. 48.

SCHEME No. 101.

Name of the Scheme.— **Improvement of landing and harbour facilities.**

Recurring	... Rs.	3,00,000	Non-recurring	...	Rs.	3,00,000
Total	... ,,	6,00,000	Ultimate annual recurring.		,,	60,000

Remarks.—Apart from measures to increase production of fish, improved facilities for landing increased production to ensure prompt disposal of fish are equally urgent and essential. For this purpose, it is necessary to effect improvements at several fishing ports in this State, such as removal of silt, breaking of protruding rocks, providing piers and navigational lights, etc. for safe landing of fish. As siltage is causing hardship to fishermen at many ports, it has been proposed to acquire one dredger under the T. C. M. Programme. Besides, the dredger, provision of 4 jetties, embankments or other landing facilities are required at many of the fishing ports where there is dire need for them. Under the scheme the fishing ports in Thana, Kolaba, Amreli, North Kanara districts and in Greater Bombay will be surveyed in order of priority and construction of jetties will be undertaken at such places where need is greater.

The following staff will be required for operation of the dredger :—

1.	Marine Engineer (Gazetted). (General Section Cl. II).	1	Rs. 220—15—440—E.B.—20—500—E.B.—25—650 (Higher salary of Rs. 500). (Mofussil).
2.	Marine Surveyor ...	1	Rs. 300—20—500 (Higher salary of Rs. 400). (City).
3.	Machine Driver ...	1	Rs. 170 per mensem fixed.
4.	Tandal	1	Rs. 120 per mensem fixed.
5.	Oilman	1	Rs. 75 per mensem. fixed.
6.	Khalasis	5	Rs. 35—½—40 (for the nine months).

Expenditure as under is involved on account of the scheme :—

(1) Expenditure on account of construction of jetties and other port facilities	Rs.	3,00,000
(2) Salary of crew and maintenance of a dredger ...	Rs.	3,00,000
Total ...	Rs.	6,00,000

SCHEME No. 102.

Name of the Scheme.—**Improvement of curing facilities at fish curing yards.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 80,000

Total ... „ 80,000 Ultimate annual recurring „ *Nil.*

Remarks.—With a view to improving the quality of fish cured at the fish curing yards, the scheme provides for the construction of cement concrete platforms with permanent supper structures over them. The cement concrete platforms, besides making available to the consumers cured fish produced under hygienic conditions, prove economically beneficial to the fish curers themselves who can realise as much as 20 per cent. saving in the quantity of salt used for curing fish. Cement concrete platforms with superstructures over them have already been constructed at Mirkarwada, Ratnagiri, and Malvan yards in the Ratnagiri District and at Majali, Karwar, Bingi, Chendia, Harwada, Keni and Murdeshwar yards in the Kanara District. At Deobag, Vengurla, Vijayadurg, Jaitapur and Shiroda yards, only the platforms resembling the plinth portion have been constructed. They are in all 54 in number. The work of providing superstructures had to be deferred due to the financial stringency. The experience, however, shows that unless the platforms are provided with permanent sheds (superstructures) the fish curers do not like to make use of them and besides, the platforms without superstructures get damaged due to exposure to sun and rain. It is, therefore, proposed to provide 30 superstructures over the existing platforms at the major yards in the Ratnagiri District. The estimated cost on account of the 30 superstructures will be Rs. 80,000.

SCHEME No. 103.

Name of the Scheme.—**Development of pearl fishing in the Okhamandal, Jaitapur and other areas.**

Recurring .. Rs. 40,000 Non-recurring .. Rs. 16,000

Total .. " 56,000 Ultimate annual recurring .. " 8,000

Remarks:—The present pearl fisheries of the State consist only of the window pane oyster fishery which produce only seed pearls. These being very small, are not usually used for ornaments. The real pearl oysters do not exist in any part of this State although they thrive in the contiguous area near Jamnagar in close proximity to Okha. Their non-availability in other areas may be due to unfavourable ecological conditions, prevailing there. It is, however, necessary to ascertain, by transplanting, as an experimental measure, real pearl oysters into Okhamandal and Ratnagiri or Kolaba costal areas and watching their growth and beedings, the possibilities of establishing them in our waters. If the investigations are successful, large scale operations can be undertaken in selected areas. Under the scheme it is proposed to appoint two Assistant Superintendents in the scale of

Rs. 120—8—160—10—230 and 4 watchmen in the scale of Rs. 30—½—35 plus allowances. In addition, the following recurring expenditure is involved on the scheme :—

		Rs.
1.	Cost of live oysters ..	9,200
2.	Cost of petrol and lubricating oil ..	3,200
3.	Rental for Assistant Superintendents office ..	975
4.	Rental for watchmen's Houses ..	312
5.	Repairs to cages, boats, engines, etc. ..	1,200
6.	Miscellaneous ..	117
	Total ..	15,004

The non-recurring expenditure on account the scheme will be as follows:—

		Rs.
1.	Cost of two boats with outboard engine ..	8,000
2.	Cost of wooden cages ..	4,000
3.	Cost of equipment such as microscope, etc. ..	2,000
4.	Cost of furniture ..	2,000
	Total ..	16,000

SCHEME No. 104.

Name of the Scheme.—**Grant of loans for the development of other aspects of fisheries.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 10,00,000 (Loan.)

Total .. " 10,00,000 Ultimate annual recurring " *Nil.*

Remarks.—Loans are granted by the Fisheries Department under the State Aid to Industries Rules, 1935, to needy fishermen for mechanisation of fishing crafts, purchase and construction of boats, purchase of nets and fishing equipment and accessories. Loans are also granted to fisheries co-operative societies and private undertakings for such development projects as establishment of ice and cold storage plants and purchase of trucks and launches for transport of fish, etc. The total loans so far granted by the department now exceed Rs. 35 lakhs.

It is anticipated that during the Plan period the Department will have to entertain a greater number of loan applications for fisheries development projects. Apart from the loans required for special purposes such as ice and cold storage plants and introduction of mechanised crafts which have beeen provided for in the respective schemes, general purpose loans for purchase of boats, nets trucks, etc. will be necessary as the tempo of development rises in the Second Five-Year Plan. A provision of Rs. 10 lakhs will, therefore, be needed for ordinary loans during the period of the Second Five-Year Plan on the basis of Rs. 2 lakhs per annum.

SCHEME No 105.

Name of the Scheme.—**Establishment of a service station at Satpati.**

Recurring ..	Rs.	49,200	Non-recurring ...	Rs.	26,800
Total ..	"	76,000	Ultimate annual expenditure ...	,,	9,840

Remarks:—The Estimates Committee in its report for 1955-56 has observed that the present arrangements are not adquate to secure proper and timely repairs to the engines of which more than 536 have now been installed on fishing crafts in this State. The number of engines will shortly exceed 600. The fisheries training scheme at Satpati under the guidance of the Food and Agriculture Organisation Fisheries expert provides for training of only 20 apprentices in the State every year. Government has also sanctioned another training scheme for training of 28 fisher boys in the opration of engines for three months each year.

The training imparted under the two schemes mentioned above will train the apprentices to drive the engines and to attend to minor defects which are incidental to continuous running of engines. They will not be able to rectify major defects which some engines accidently develop. Further each engine requires complete overhauling at least once a year when the different parts are separated and those which are subjected to heavy wear and tear are either replaced or repaired. This required the services of expert mechanics with a well equipped work shop at their disposal. At a place like Satpati where the number of fishing boats is above 150, there are no service stations and hence fishermen who are practically laymen have to get their boats repaired in a place like Bombay keeping in suspension their fishing work till the boats are repaired. This entails additional expenditure. It is, therefore, proposed to establish a servicing station during the Second Five-Year Plan at Satpati. Fish from Murbe, Kharekuran, Shirgaon is landed at satpati and fishermen from adjoining fishing centres such as Edvan, Kelwa-Mahim, Uchheli, Ghivali, Navapur, etc. can also conveniently take advantage of the servicing station.

SCHEME No. 106

Name of the Scheme.—**Grant of loan and subsidy for establishment of a boat building yard.**

Recurring ...	Rs.	*Nil.*	Non-recurring ...	Rs.	1,00,000
Total ...	,,	1,00,000	Ultimate annual recurring ...	,,	*Nil.*

Remarks.—At present fishermen have to purchase boats at exhorbitant prices from private individuals who dictate their own terms. If fishermen's organisations have their boat-building yard run on co-operative basis, it would effectively assist development of fisheries on proper lines. Construction of fishing boats at economic prices would greatly increase the production of fish and help mechanization. Due to want of resources and poor economic condition of the fishermen, the societies doing the work of construction of boat-building are unable to develop their work on the modern lines and increase their output. This is a great hindrance to progressive development of fisheries and will have to be removed by providing necessary financial aid. It is, therefore, proposed, during the Second Five Year Plan, period to build such a Boat-building yard on co-operative basis. The estimated cost of the yard is given below :—

	Rs.
Cost of boat-building shed	40,000
Cost of Machine shop	30,000
Cost of Machinery and equipment	30,000
Total ...	1,00,000

The scheme will give an impetus to boat-building on co-operative basis, and with the added advantage of the vessels being made available to the fishermen at reasonable rates. This will also lead to increased output of fish as more fishermen will take to mechanisation. An indirect benefit of the scheme will be to provide employment to village artisans and labour required for construction of boats.

An amount of Rs. 25,000 is expected to be received from the Government of India by way of subsidy.

AGRICULTURE AND COMMUNITY DEVELOPMENT.

(COMMUNITY DEVELOPMENT PROJECTS, NATIONAL EXTENSION SERVICES AND RURAL DEVELOPMENT).

SCHEME No. 107.

Name of the Scheme.—**Expansion of the Community Development and National Extension Service Programme.**

Recurring ... Rs. 9,13,88,500 Non-recurring ... Rs. 19,85,47,000

Total ... ,, 28,99,35,500* Ultimate annual recurring. ,, *Nil.*

*The total of recurring and non-recurring expenditure comes to Rs. 28,99,35,500. In the Second Plan a lump provision of Rs. 24 crores only has been made and the scheme is to be modified so as to be accommodated within the reduced provision. The scheme as originally drafted is, however, described below.

Remarks.—In the Bombay State the programme of community Development was started by launching in October, 1952, four full-fledged Community Development Projects and one Community Development Block. In October, 1953, six more Community Development Blocks were added and simultaneously the National

Extension Service Programme was also launched in ten talukas. Subsequently, that is, in January, 1954 and October, 1954, ten and fifteen additional talukas, respectively, were brought under the National Extension Service Programme. In June 1955 additional Community Development Blocks were opened in ten talukas. In October 1955 additional National Extension Service Blocks were opened in seven talukas. The two programmes have together so far covered 6,325 villages and a population of 51,92,176.

2. With effect from the 1st June 1955, fourteen of the National Extension Service Blocks which were started either in October, 1953 or January, 1954 have, on the basis of their performance, been converted into Community Development Blocks.

3. By the end of the Second Five-Year Plan period, i.e., 1960-61, it is proposed to cover the entire State by the Community Development and National Extension Service Programme. This would practically cover all areas in the State, except such of the cities as have a population of over one lakh.

4. The population of the State, excluding the population of cities having more than one lakh persons, is 3,08,80,000. On the basis of this population, 468 Blocks (of 66,000 population each) of both National Extension Service and Community Development category will cover the entire State.

5. The division of the 468 Blocks, during the First and the Second Five-Year Plans is as under :—

First Five-Year Plan.	*Second Five-Year Plan*
117 Blocks.	351 Blocks.

In the Bombay State, areas equal to 79 Blocks have been brought under the programme so far. With the expected additions of 38 Blocks in October, 1955, the quota of 117 Blocks of the First Plan will be completed. This will leave the balance of 351 Blocks for the Second Five-Year Plan.

The tentative allotment of the Community Development National Extension Service Blocks by Community Projects Administration will be as follows :—

Year	National Extension Service Blocks	Community Development Blocks
1956-57	46	23
1957-58	60	23
1958-59	69	30
1959-60	83	34½
1960-61	93	41½
	351	152

6. It is estimated that, the total expenditure on the expansion of the Community Development and National Extension Service Programme during the Second Five-Year Plan will be Rs. 28,99,35,500 as shown in the accompanying statement. The break up of this expenditure into 'recurring', 'non-recurring' and 'loan' and 'non-loan' will be as under :—

Recurring ..	Rs.	9,13,88,500
Non-recurring ..	Rs.	19,85,47,000
	Rs.	28,99,35,500
Loan ..	Rs.	10,49,05,000
Non-loan ..	Rs.	18,50,30,500
	Rs.	28,99,35,500

7. This expenditure will be shared by the Centre and the State Government as under :—

	State.	Centre.
Recurring ..	50 per cent.	50 per cent.
Non-recurring ..	25 per cent.	75 per cent.
Loan ..	*Nil.*	100 per cent.

On the above basis, the Centre's and the State's share in the total expenditure of Rs. 28,99,35,500 will be as under :—

	Centre's Share.	State's Share.
	Rs.	Rs.
Grants ..	11,59,25,750	6,91,04,750
Loans ..	10,49,05,000	......
	22,08,30,750	6,91,04,750

Statement showing the spread out of Community Development/National Extension Service Programme in the Bombay State during the First and Second Five-Year Plans.

(Rs. in lakhs)

Year	Blocks	Date of commencement	Duration during the year	Date of conversion and duration in converted form	Total number of blocks	Total expenditure (Rs.)	Recurring expenditure (Rs.)	Non-recurring expenditure (Rs.)	Loanable (Rs.)	Non-loanable (R
1	2	3	4	5	6	7	8	9	10	11
			Months							
1955-56 ...	4 Community Development Projects.	2nd October 1952.	12	......	20	1,00·00	28·20	71·80	49·80	50·20
	1 Community Development Blocks.	......	...	......	...	...	...	...	...	...
	6 Community Development Blocks.	2nd October 1953.	12	......	6	30·00	8·46	21·54	14·94	15·06
	15 National Extension Service Blocks.	2nd October 1953.	12	......	15	22·50	7·50	15·00	5·10	17·40
	16 National Extension Service Blocks.	26th January 1954.	12	......	16	24·00	8·00	16·00	5·44	18·56
	22 National Extension Service Blocks.	......	12	......	22	33·00	11·00	22·00	7·48	25·52
	38 National Extension Service Blocks.	......	6	......	38	28·50	9·50	19·00	6·16	22·04
					1,17	2,38·00	72·66	1,65·34	89·22	1,48·78

Statement showing the spread out of Community Development/National Extension Service Programme in the Bombay State during the Fist and Second Five-Year Plans.

(Rs. in lakhs)

Year	Blocks	Date of commencement	Duration during the year	Date of conversion and duration in converted form	Total number of blocks	Total expenditure (Rs.)	Recurring expenditure (Rs.)	Non-recurring expenditure (Rs.)	Lonable. (Rs.)	Non-lonable (Rs.)
1	2	3	4	5	6	7	8	9	10	11
			Months							
1956–57 ...	4 C. D. Projects plus 1 block ...	2nd October 1952.	6	2nd October 1956, converted into N. E. S. Blocks.	20	50·00	14·20	35·80	24·80	25·20
	20 N. E. S. Blocks ...	2nd October 1956.	6	......	...	3·30	3·30	...	...	3·30
	6 C. D. Blocks	2nd October 1953.	6	2nd October 1956, converted.	6	15·00	4·26	10·74	7·44	7·56
	6 N. E. S. Blocks ...	2nd October 1956.	6	Do. ...	...	0·99	0·99	...	...	0·99
	15 N. E. S. Blocks ...	2nd October 1953.	6	Do. ...	15	11·25	3·75	7·50	2·55	8·70
	15 C. D. Blocks	2nd October 1956.	6	Do. ...	...	37·50	10·65	26·85	18·60	18·90
	8 N. E. S. Blocks	26th January 1954.	10	1st February 1957, converted.	8	10·00	3·33	6·67	2·26	7·64

8 C. D. Blocks ...	... 1st February 1957.	2	Do. ...	...	6·67	1·89	4·78	3·31	3·36
8 N. E. S. Blocks ...	... 26th January 1954.	12	......	8	12·00	4·00	8·00	2·64	9·36
22 N. E. S. Blocks	... 2nd October 1954.	12	......	22	33·00	11·00	22·00	7·48	25·52
38 N. E. S. Blocks	... 2nd October 1955.	12	......	38	57·00	19·00	38·00	12·92	24·08
46 N. E. S. Blocks	... 2nd October 1956.	6	......	46	34·50	11·50	23·00	7·59	26·91
			Total ...	1,63	2,71·21	87·87	1,83·34	89·59	1,81·62

Statement showing the spread out of Community Development/National Extension Service Programme in the Bombay State during the First and Second Five-Year Plans.

(Rs. in lakhs)

Year	Blocks	Date of commencement	Duration during the year	Date of conversion and duration in converted form	Total number of blocks	Total expenditure (Rs.)	Recurring expenditure (Rs.)	Non-recurring expenditure (Rs.)	Loanable (Rs.)	Non-Loanable (Rs.)
1	2	3	4	5	6	7	8	9	10	11
1957-58 ...	20 N. E. S. Blocks	2nd October 1956 ...	12 months	......	20	6·60	6·60	...	...	6·60
	6 N. E. S. Blocks	Do. ...	12 months	......	6	1·98	1·98	...	...	1·98
	15 C. D. Blocks ...	Do. ...	12 months	......	15	75·00	21·15	50·85	37·35	37·65
	8 C. D. Blocks ...	1st February 1957...	12 months	......	8	10·00	11·28	28·72	19·92	20·08
	8 N. E. S. Blocks	26th January 1954...	6 months	2nd October 1957 converted.	8	6·00	2·00	4·00	1·32	4·68
	15 N. E. S. Blocks	2nd October 1954 ...	6 months	2nd October 1957 converted into C. D. Blocks.	15	11·25	3·75	7·50	2·48	8·77
	7 N. E. S. Blocks	Do. ...	12 months	......	7	10·50	3·50	7·00	2·31	8·19
	23 C. D. Blocks ...	2nd October 1957 ...	6 months	......	23	57·50	16·21	41·29	28·64	28·86
	38 N. E. S. Blocks	2nd October 1955 ...	12 months	......	38	57·00	18·00	38·00	12·92	44·08
	46 N. E. S. Blocks	Do. ...	12 months	......	46	69·00	23·00	46·00	15·18	58·82
	60 N. E. S. Blocks	2nd October 1957 ...	6 months	......	60	15·00	15·00	30·00	7·72	35·08
				Total ...	2,46	2,79·83	1,23·47	2,56·36	1,30·04	2,49·79

1958-59 ...	20 National Extension Service Blocks.	2nd October 1956...	12 months	......	20	6·60	6·60	...	...	6·60
	6 N. E. S. Blocks	Do. ...	12 months	......	6	1·98	1·98	...	...	1·98
	15 Community Development Blocks.	Do. ...	12 months	......	15	75·00	21·15	53·85	37·35	37·65
	8 C. D. Blocks ...	1st February 1957...	12 months	......	8	40·00	11·50	28·50	19·92	20·08
	23 C. D. Blocks ...	2nd October 1957...	12 months	......	23	1,15·00	32·92	82·58	57·28	57·72
	7 N.E.S. Blocks ...	2nd October 1954...	6 months	2nd October 1958, converted into N. E. S. Blocks.	27	5·25	1·75	3·50	1·16	4·09
	25 N. E. S. Blocks	2nd October 1955...	6 months	......	23	17·25	5·75	11·50	3·87	13·38
	15 N. E. S. Blocks	Do. ...	12 months	......	15	11·25	8·75	7·50	2·55	8·70
	30 C. D. Blocks ...	2nd October 1958...	6 months	......	30	75·00	21·25	53·75	37·35	37·65
	40 N.E.S. Blocks...	2nd October 1956...	12 months	......	16	69·00	23·00	46·00	15·18	53·82
	60 N.E.S. Blocks...	2nd October 1957...	12 months	......	60	90·00	30·00	60·00	19·81	70·16
	N.E.S. Blocks...	2nd October 1958...	6 months	......	69	61·75	17·25	34·50	11·73	40·02
					3,12	1,58·08	1,76·40	3,81·68	2,06·23	3,51·85

Statement showing the spread out of Community Development/National Extension Service Programme in the Bombay State during the First and Second Five-Year Plans.

(Rs. in lakhs)

Year	Blocks	Date of commencement	Duration during the year	Date of conversion and duration in converted form	Total No. of blocks	Total expenditure (Rs.)	Recurring expenditure (Rs.)	Non-recurring expenditure (Rs.)	Loanable (Rs.)	Non-loanable (Rs.)
1	2	3	4	5	6	7	8	9	10	11
1959–60 ...	20 N. E. S. Blocks ...	2nd October 1956 ...	12 months.	......	20	6·60	6·60	...	...	6·60
	6 N. E. S. Blocks ...	Do. ...	12 months.	......	6	1·98	1·98	...	...	1·98
	15 C. D. Blocks ...	Do. ...	6 months.	2nd October 1959, converted into N. E. S. Blocks.	15	37·50	10·65	26·85	18·60	18·90
	15 N. E. S. Blocks ...	2nd October 1959 ...	6 months.	......	...	2·475	2·475	...	...	2·475
	8 C. D. Blocks ...	1st February 1957	10 months.	Converted into N. E. S. on 1st February 1960.	16	66·67	18·80	47·87	33·20	33·47
	8 N. E. S. Blocks ...	1st February 1960	2 months.	......	...	0·88	0·88	...	...	0·88
	23 C. D. Blocks ...	2nd October 1957 ...	12 months.	......	23	115·00	32·42	82·58	57·28	57·72
	30 C. D. Blocks ...	2nd October 1958 ...	12 months.	2nd October 1959, converted.	30	150·00	42·50	1,07·50	74·70	75·30
	15 N. E. S. Blocks ...	2nd October 1955 ...	6 months.	......	15	11·25	3·75	7·50	2·48	8·77
	19½ N. E. S. Blocks ...	2nd October 1956 ...	6 months.	2nd October 1959, converted into C. D. Blocks.	19½	4·62	4·87	9·75	6·44	8·18
	27 N.E.S. Blocks ...	Do. ...	12 months.	......	27	40·50	18·50	27·00	9·00	31·50
	24½ C.D. Blocks ...	2nd October 1959 ...	6 months.	......	27	26·25	24·15	62·10	43·12	43·13
	60 N. E. S. Blocks ...	2nd October 1957 ...	12 months.	......	60	90·00	30·00	60·00	19·84	70·16
	69 N. E. S. Blocks ..	2nd October 1958 ...	12 months.	......	69	103·50	34·50	69·00	23·46	80·04
	83 N. E. S. Blocks ...	2nd October 1959 ...	6 months.	......	83	62·25	20·75	41·50	13·70	48·55
					2,63½	7,89·475	2,47·825	5,41·65	3,01·82	4,87·650

1960-61 ...	20 N. E. S. Blocks ...	2nd October 1956 ...	12 months	......	20	6·60	6·60	...	...	6·60
	6 N. E. S. Blocks ...	Do. ...	12 months	......	6	1·98	1·98	...	...	1·98
	15 N. E. S. Blocks ...	2nd October 1959 ...	12 months	......	15	4·95	4·95	...	...	4·95
	8 N. E. S. Blocks ...	1st February 1960...	12 months	......	8	2·64	2·64	...	...	2·64
	23 C. D. Blocks ...	2nd October 1957 ...	6 months	2nd October 1960, converted into N. E. S. Blocks.	23	57·50	16·21	41·29	28·64	28·86
	23 N. E. S. Blocks ...	2nd October 1960 ...	6 months	......	...	3·82	3·82	...	...	3·82
	30 C. D. Blocks ...	2nd October 1958 ...	12 months	......	30	1,50·00	42·50	1,07·50	74·70	75·30
	34½ C. D. Blocks ...	2nd October 1959 ...	12 months	......	34½	1,72·50	48·30	1,24·20	86·24	86·26
	27 N. E. S. Blocks ...	2nd October 1956 ...	6 months	2nd October 1960, converted into C. D. Blocks.	27	20·25	6·75	13·50	4·50	15·75
	27 C. D. Blocks ...	2nd October 1960 ...	6 months	Do. ...	14½	67·50	18·90	48·60	23·75	43·75
	14½ N. E. S. Blocks	2nd October 1957 ...	6 months			10·77	3·52	2·25	4·70	5·99
	14½ C. D. Blocks ...	2nd October 1960 ...	6 months			36·25	10·15	26·10	17·50	18·75
	27 N. E. S. Blocks ...	2nd October 1957 ...	12 months	......	27	40·50	13·50	27·00	19·00	31·50
	18½ N. E. S. Blocks...	2nd October 1959 ...	12 months	......	18½	27·75	9·25	18·50	6·10	21·65
	69 N. E. S. Blocks ...	2nd October 1958 ...	12 months	......	69	1,03·50	24·50	79·00	23·46	80·04
	83 N. E. S. Blocks ...	2nd October 1959 ...	12 months	......	83	1,24·50	41·50	83·00	27·40	97·10
	93 N. E. S. Blocks ..	2nd October 1960 ...	6 months	......	93	69·75	23·25	46·50	15·30	54·45
				Total ...	4,68½	9,00·76	2,78·82	6,22·44	3,21·37	5,79·39

Abstract of Expenditure on Community Development/National Extension Service Programme from 1955–56 to 1960–61

(Rs. in lakhs)

Year		Total expenditure	Recurring Expenditure	Non-recurring expenditure	Loanable expenditure	Non-loanable expenditure
1		2	3	4	5	6
1955–56 ...	...	2,38·00	72·66	1,65·34	69·22	148·78
		2,38·00	72·66	1,65·34	69·22	148·78
1956–57 ...	...	2,71·21	87·87	1,83·34	89·59	1,81·62
1957–58 ...	...	379·83	1,23·47	2,56·36	1,30·04	2,49·79
1958–59 ...	...	5,58·08	1,76·40	3,81·68	2,06·23	3,57·85
1959–60 ...	...	7,89·475	2,47·825	5,41·65	3,01·82	4,87·655
1960–61 ...	...	9,00·760	2,78·320	6,22·44	3,21·37	5,793·9
1956–61 ...	...	28,99·355	9,13·885	19,85·47	10,49·05	18,50·305
Grand Total	...	31,37·355	9,86·545	21,50·81	11,38·27	19,99·985

Allocation of expenditure between Central and State Governments during the Second Five Year Plan period.

		Central Share	State's share	Total
		Rs.	Rs.	Rs.
Grants	...	11,59,25,750	6,91,04,750	18,50,30,500
Loans	...	10,49,05,000	......	10,49,05,000
Total	...	22,08,30,750	6,91,04,750	28,99,35,500

SCHEME No. 108.

Name of the Scheme.—**Local Development Works Programme.**

Recurring	... Rs. 8,00,000	Non-recurring	... Rs. 32,00,000
Total	... ,, 40,00,000	Ultimate annual recurring	,, Nil.

Remarks.—In order to infuse interest in the Plan among as wide a section of the community as possible and to draw forth local initiative and resources of the people a programme of local development works was launched by the Government of India during the year 1953–54 under the Five-Year Plan. Small works for the benefit of the rural areas which were not covered directly by any of the schemes already included in the Five-Year Plan were undertaken under this Programme. The main principles underlying the programme of local works are that (1) the assistance provided by the Central Government should be supplemented by contribution from the State Government and from the local bodies and the people, (2) 50 per cent. of the cost of each work should, as a rule, be contributed by the local body and the people in the form of cash, materials or labour, the rate of contribution, however, being low in the case of works in areas where the people are backward and/or poor and (3) schemes involving little or no recurring expenditure benefiting rural areas costing Rs. 5,000 to Rs. 40,000 should be taken up under the programme. The following are the categories of works most suitable for assistance from the Government of India under the Local Development Works Programme—

(1) drinking water supply schemes,

(2) permanent works for improvement of agriculture,

(3) permanent works for improvement of rural sanitation,

(4) village roads including small bridges and culverts,

(5) improvements to school or dispensary buildings where such institutions already exist and are inadequately housed,

(6) construction of godowns for storage of goods provided the benefit accrues to the public generally.

2. In the year 1953–54, a programme of Local Development Works costing Rs. 75 lakhs was accordingly undertaken in this State, the share of the Government of India being Rs. 25 lakhs, share of the State Government being Rs. 12½ lakhs and local contribution Rs. 37½ lakhs. In the year 1954–55, the total programme was of the order of Rs. 150 lakhs, Central and State shares being Rs. 59·70 lakhs and Rs. 25 lakhs respectively. In the year 1955–56 a programme of equal magnitude had been targetted. It will thus be seen that the response received from the public is very encouraging as contribution was received not only in cash, but also in materials, supplies, labour etc. In areas where the people are poor and/or backward, contribution was accepted at a low rate and people came forward to work with reduced wages, such reduction being treated as popular contribution.

3. In view of the enthusiasm received from the public it is proposed to undertake a programme of local works costing Rs. 8 crores during the Second Five-Year Plan. The share of the Central Government will be Rs. 4 crores and an equivalent amount by way of contribution from local bodies and from the people is expected. A provision of Rs. 40 lakhs is being made in the State Plan to cover the cost of administrative and technical staff required for the implementation of this programme and to make up any deficiency of popular-*cum*-local body contribution in certain backward areas. The net cost to State Government will be Rs. 40 lakhs which is proposed to be included in the Second Five-Year Plan.

SCHEME No. 109.

Name of the Scheme.—**Sarvodaya Development.**

Recurring	... Rs.	85,00,000	Non-recurring	... Rs.	Nil.
Total	... ,,	85,00,000	Ultimate annual recurring	,,	Nil.

Remarks.—Under the Sarvodaya Development Scheme which was started in Bombay State in 1949–50 there are 29 Sarvodaya Centres functioning in 25 Districts of the State. Government has been providing an annual grant of Rs. 16 lakhs for these Centres. The development activities undertaken at these Centres relate to (*i*) Agricultural Development, (*ii*) Development of Cottage Industries, (*iii*) Health, (*iv*) Water Supply, (*v*) Communication. Works of Public Utility are also undertaken with the co-operation of local people who contribute a part of the cost varying from 25 per cent. to 50 per cent. in the form of cash, labour and/or material. As these activities are of repetitive nature, it is necessary to include this as a development scheme in the Second Five-Year Plan. It is accordingly proposed to make a provision of Rs. 85,00,000 so as to provide. Rs. 75,00,000 on account of grants to the Sarvodaya Centres, and Rs. 10,00,000 on account of loans to Sarvodaya Sanchalaks.

SCHEME No. 110.

Name of the Scheme.—**Grants to District Development Boards for agricultural and cattle shows.**

Recurring	.. Rs.	2,02,500	Non-recurring	.. Rs.	Nil.
Total	.. „	2,02,500	Ultimate annual recurring	„	Nil.

Remarks.—The District Development Boards hold agricultural and cattle shows in their Districts and for that purpose a provision of Rs. 27,000 at the rate of Rs. 1,000 per Board is made every year at present. An equal amount will be locally collected by the Boards which will be entrusted with the organisation of these shows in their respective Districts. It is necessary to hold these shows on an intensive scale and encourage improvement of agriculture in general and livestock in particular in the State. It is, therefore, proposed to increase the grant from Rs. 1,000 to Rs. 1,500 per Board during the Second Five-Year Plan, period at a total cost of Rs. 2,02,500 and an equivalent amount will be locally collected by the Boards. The net liability of the State Government will be Rs. 2,02,500 only.

SCHEME No. 111.

Name of the Scheme.—**Discretionary Grants to Collectors for Rural Development.**

Recurring	.. Rs.	2,56,500	Non-recurring	.. Rs.	Nil.
Total	.. „	2,56,500	Ultimate annual recurring	„	Nil.

Remarks.—Government sanctions every year an amount of Rs. 50,000 as discretionary grants to Collectors of the Districts. This amount which comes to only about Rs. 1,900 per District is spent by the Collectors for promoting the various Rural Development and other activities in the District.

The purposes for which the grants are utilised are given below :—

(*a*) Improvement of agriculture, livestock, roads, village water supply, public health, sanitation, cottage industries, rural education and other similar objects.

(*b*) Organisation of agricultural demonstrations in villages, giving prizes at ploughing and wrestling matches connected with agricultural shows and other demonstrations, providing pan-supari and light refreshment to villagers, village officers, village servants, etc., attending official gatherings and other incidental expenses which tend to promote good feelings between Government and the agriculturists. Due to increase in the development activities undertaken so far in rural areas, viz., Local Development Works etc. in the First Five-Year Plan, the responsibility of the Collectors has already increased. During the Second Five-Year Plan Development schemes benefiting rural areas are likely to be undertaken on an intensive scale. Even so, it is necessary that discretionary grants which stand at present at Rs. 1,900 per District should be continued.

SCHEME No. 112.

Name of the Scheme.—**Financial Assistance to Village Panchayats in Adivasi and Backward Areas.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	16,00,000
Total	.. „	16,00,000	Ultimate annual recurring	„	Nil.

Remarks.—Government has decided to establish Village Panchayats to cover each and every village of the State within a period of 3 years beginning from 1955–56 in order to implement the directive principles laid down in article 40 of the Constitution. Government is paying a lump sum grant of 30 per cent. land revenue to Village Panchayats. Except 30 per cent. land revenue grant, no other grant is paid to Village Panchayats. At the Conference held at Mount Abu on the 30th May 1955, the question of establishing Village Panchayats in Adivasi and Backward areas was considered. It was decided at the Conference that in Backward and Adivasi areas, the house tax, which is at present compulsory, may not be levied for some years and that increased subsidy may be given to provide amenities in these areas. The following districts are treated as Scheduled areas or Backward and under-developed areas :—

(1) Panchmahals, (2) Banaskantha, (3) Sabarkantha, (4) Surat, (5) Thana, (6) East Khandesh, (7) West Khandesh, (8) Nasik, (9) Poona, (10) Ahmednagar, (11) Kanara, (12) Kolaba, (13) Ratnagiri, (14) Baroda, (15) Broach.

The total number of villages in these districts comes to about 17,939. The exact number of villages in these Districts which are backward and will require financial assistance is not known. It may be assumed that about one-fourth of the number of villages in these districts are backward, i.e., 4,500 (approximately). People in these areas are too poor and mostly illiterate. They live at scattered places and have no village sites. They have to be persuaded to settle at one place which may be provided as a free village site. They are not in a position to pay any taxes. In Backward and Adivasi areas the rate of agricultural assessment is very low in view of poor soil in these areas and 30 per cent. land revenue grant in such areas will be a small amount and would be far too inadequate to meet the requirements of such areas. People in these areas need to be provided with amenities, such as village sites, roads, lights etc. Backward and Adivasi areas will, therefore, require increased assistance in the form of grant or subsidy. A lump amount of Rs. 16 lakhs has, therefore, been provided in the Second Five-Year Plan for financial assistance to Village Panchayats in Backward and Adivasi areas.

SCHEME No. 113.

Name of the Scheme.—**Establishment of Village Panchayats in all villages in Bombay State.**

Recurring	.. Rs.	3,66,90,000	Non-recurring.	.. Rs.	Nil.
Total	.. „	3,66,90,000	Ultimate annual recurring	„	1,71,20,000

Remarks.—Government has decided as a matter of policy to establish a Village Panchayat in each and every village in the State within a period of three years from 1955–56 and accordingly additional village panchayats are being established in one-third of the villages in the State this year. At present the Village Panchayats are given grants at the rate of 25 per cent. of the land revenue. It is proposed to raise this rate to 30 per cent. of the land revenue and necessary legislation for the purpose will be taken up in the near future.

In the year 1955-56, a total provision of Rs. 144·19 lakhs was made for grants to Village Panchayats (Rs. 98·86 lakhs) and District Local Boards (Rs. 45.33 lakhs). Government has, however, decided to pay a lump sum grant of 30 per cent. land revenue to Village Panchayats already established and to be established hereafter from 1955-56 and to give 5 per cent. land revenue grant to District Local Boards for a period of 5 years from 1955-56 in villages where Village Panchayats will be established as a result of Government policy to establish Village Panchayats all over the State. The following table shows the expenditure on account of grants to new and existing Village Panchayats and District Local Boards, during the period of the Second Five-Year Plan :—

(Rs. in lakhs)

Year		Village Panchayats		District Local Boards
		At 25 per cent. of the land revenue	Additional 5 per cent. of the land revenue	At 25 per cent. of the land revenue
1956-57	..	1,34·53	22·67	32·66
1957-58	..	1,71·20	34·00	19·00
1958-59	..	1,71·20	34·00	19·00
1959-60	..	1,71·20	34·00	19·00
1960-61	..	1,71·20	34·00	12·66
Total	..	8,19·33	1,68·67	1,02·32

An amount of Rs. 751·34 lakhs on account of grants to Village Panchayats and District Local Boards on the basis of the budget estimates for 1955-56 has already been provided in the forecast while working out the financial resources available for the Second Five-Year Plan. The additional amount required during the Second Five-Year Plan period for grant of assistance to the Village Panchayats at the rate of 30 per cent. of the land revenue and to the District Local Boards is thus Rs. 333·98 lakhs and an equal provision is, therefore, proposed to be included in the Second Five-Year Plan. The ultimate annual recurring cost of Rs. 171·20 lakhs represents the amount required in 1962-63 for grants to Village Panchayats when no grants will be paid to the District Local Boards. A provision of Rs. 32,92,000 has also been made for the supervision and additional staff for organisation of Village Panchayats.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(Co-operation)

SCHEME No. 114.

Name of the Scheme.—**Reorganisation of the Administrative Set-up.**

Recurring ... Rs. 14,39,280 Non-recurring ... Rs. 64,720
Total ... ,, 15,04,000 Ultimate annual recurring... ,, 2,87,856

Remarks.—With the steps taken to implement the integrated Scheme of Rural Credit and Marketing outlined in the All India Rural Credit Survey Report, it would also be necessary to take simultaneously steps for re-organising the administrative setup of the Co-operative Department, so as to make it fully responsive to the needs of an expanding Department. The Committee of Direction has emphasised that for the effective implementation of the integrated Scheme, the foremost need is adequate personnel and the adequacy required pertains to many things, viz., number, training and above all the responsiveness to the needs of what in effect is a new type of job to be done.

The main features of the proposed reorganisation are—

(*i*) Improvement in the status and consequently the quality of the cadre of the Assistant Registrars, of Co-operative Societies, so as to be commensurate with their increased duties and responsibilities, and

(*ii*) Strengthening of the clerical and executive staff at the district level, so as to cope up with the increase in work.

To facilitate this process of reorganisation, it would also be necessary to take up a phased programme of recruitment and provide adequate facilities for training.

The Scheme will cost to Government about Rs. 15,04,000 during the Second Plan period.

SCHEME No. 115.

Name of the Scheme.—**Reorganisation of the Administrative Organisation for the implementation of the Bombay Money-Lenders' Act.**

Recurring	... Rs.	8,15,000	Non-recurring	... Rs.	Nil.
Total	... ,,	8,15,000	Ultimate annual recurring	,,	1,63,000

Remarks.—The responsibility for the general administration of the Bombay Money-Lenders' Act devolves on the Registrar of Co-operative Societies who has been appointed as Registrar General of Money-Lenders under the Act. To facilitate administration in the districts, except in certain areas like Bombay, Poona, Ahmedabad, Kolhapur and Hubli where special staff of Registrars and Assistant Registrars of Money-lenders has been appointed, Personal Assistants to the Collectors and Mamlatdars and Mahalkaries have been appointed as Registrars and Assistant Registrars of Money-lenders for their respective districts and talukas.

In the light of the recommendations made by the Committee of Direction of the Reserve Bank of India in its report on Rural Credit Survey, it would be necessary to make arrangements for more effective administration of the Act in future.

The reorganisation of the administrative set-up proposed is as under :—

(1) The revenue authorities, viz., Personal Assistants to the Collectors, who work as Registrars of Money-lenders and Mamlatdars and Mahalkaries, who work as Assistant Registrars of Money-lenders in districts where special staff has not been provided, may be relieved of the responsibilities relating to the administration of the Act.

(2) In the districts where there are more than 500 moneylenders, full time AssistantRegistrar of Moneylenders, may be provided. Each Assistant Registrar may be given assistance of an Inspector of Moneylenders in the grade of Rs. 150—10—200 to assist him in the work relating to summary enquiries and an office staff consisting of three clerks and two peons.

(3) In other districts, where the work is comparatively less, the Assistant Registrar of Co-operative Societies may be appointed as Assistant Registrars of Moneylenders. The Assistant Registrars may be provided with the assistance of a clerk in the office and Inspector of Moneylenders for out-door work.

(4) For performance of the duties of Registrar of Moneylenders the cadre of Registrars may be reinforced by creation of five more posts, increasing the strength of the cadre to eight. The Divisional Deputy Registrars of Co-operative Societies may also be appointed Registrar of Moneylenders and placed in charge of one or two districts.

In view of (1) above, it should be possible for the Collectors to surrender as many as 26 posts of Aval Karkuns, 123 posts of clerks and 23 posts of peons. On the other hand, as against this retrenchment, the staff requirements of the Co-operative Department would be as under—

(*i*) 5 posts of Registrars of Moneylenders

(*ii*) 5 posts of Assistant Registrars of Moneylenders, one each for Baroda, Kaira, East Khandesh and Sholapur Districts and an additional post of Assistant Registrar for Kolhapur District. The post of the Assistant to the Registrar of Moneylenders at Mehsana will also have to be upgraded to the grade of an Assistant Registrar, thus increasing the strength of the cadre from five to eleven. Sabarkantha and Banaskantha Districts may not require full-time Assistant Registrars as the Co-operative work in these districts is comparatively less while East Khandesh and Sholapur may require full-time Assistant Registrars of Moneylenders.

(*iii*) 3 posts of Inspectors of Money-lenders.

(*iv*) 7 posts of senior clerks for the offices of the Registrars of Moneylenders.

(*v*) 83 posts of clerks for the offices of the Regtisrars and Assistant Registrars of Moneylenders and Deputy Registrars and Asstisant Registrars of Co-operative Societies

(*vi*) 39 posts of peons and 31 posts of attendants. The cost on account of the staff requirements works out at nearly 3.58 lakhs, as against which the savings on account of the staff to be surrendered by the Collectors works out roughly at Rs. 2.27 lakhs. The additional cost involved in this proposal, therefore, works out roughly at Rs. 1.31 lakhs for the first year, 1.63 lakhs for the second year, 1.672 lakhs for the third year, 1.715 lakhs for the fourth year and 1.818 lakhs for the fifth year.

The proposed reorganisation holds out certain district advantages in-as-much as the officers of the Co-operative Department which will be responsible for working out the scheme of integrated credit, will get an opportunity of coming into close contact with the activities of moneylenders, who will, as the Committee has observed, in their individual degrees supplement the integrated scheme of rural credit.

SCHEME No. 116.

Name of the Scheme.—**Expansion of the Statistical Section in the Co-operative Department.**

Recurring	... Rs.	4,55,718	Non-recurrings	... Rs.	9,400
Total	... ,,	4,65,113	Ultimate annual recurring	,,	52,650

Remarks.—The need for constant, reliable and accurate data both for the planning and execution of various schemes, needs hardly any emphasis. It is, therefore necessary to evolve a scheme for collection of statistical deta on scientific and adequate basis. The Rural Credit Survey Report had also advocated the need of conducting periodical surveys and carrying out researches in various districts connected with the Co-operative Movement. It is, therefore, proposed to have a separate statistical section in the Co-operative Department which would not only arrange for collection of statistical data, but also provide accurate provision to assure that the statistical returns from various sources are received in time and collected properly. At the district level it is proposed to have 28 statistical assistants while at the Head Office, apart from having a Statistician in Class I of the Bombay Co-operative Service, additional staff consisting of 1 Research Assistant, 4 Statistical Assistants, 2 Junior Clerks, 1 Draftsman and 2 peons will be required. The total cost involved on appointment of this staff is estimated at Rs. 4,55,718.

It is expected that the Government of India through the Central Statistical Organisation will bear part of the cost of this Scheme, for the time being, however, the entire cost has been shown against the State Government.

SCHEME No. 117.

Name of the Scheme.—**Co-operative Training, Education and Propaganda.**

Recurring	... Rs.	38,86,500	Non-recurring	... Rs.	13,500
Total	... „	39,00,000	Ultimate annual recurring ...	„	7,77,000

Remarks.—The Scheme is intended to train the personnel of the Co-operative Department as well as of the Co-operative institutions at different levels. It is also intended to train the subordinate officers of the Department and to enlarge the scope of propaganda by award of shields by institutions of prizes to the best-managed institutions in various districts.

The scheme will be implemented through the Bombay Provincial Co-operative Institute, which will be given the necessary assistance in the form of subsidy.

The Regional Co-operative Schools will function as fullfledged reorganised units in terms of the scheme approved by the Central Committee for Co-operative Training.

The scheme is expected to cost Rs. 39·00 lakhs. The breakup of the cost of the Scheme and its allocations between the State Government and the Centre is shown below :—

Particulars	Total Cost	Share of Government of India	Share of State Government
	Rs.	Rs.	Rs.
Non-Recurring grant ...	13,500	6,750	6,750
Recurring grant ...	27,17,500	13,36,750	13,80,750
Cost of staff deputed for training	11,69,000	5,84,500	5,84,500
Total ...	39,00,000	19,28,000	19,72,000

SCHEME No. 118.

Name of the Scheme.—**Extension of Agricultural Credit.**

Recurring	... Rs. 60,56,000	Non-recurring	... Rs. 25,25,000
Total	... „ 85,91,000	Ultimate annual recurring	... „ 12,11,000

Remarks.—The Rural Credit Survey has disclosed that in the State of Bombay Co-operative Credit Institutions have been providing about 16 per cent. of the total agricultural credit (short-term, medium-term and long-term) requirements of the agricultural families, and that this is availed of by just about 8 per cent. of the cultivating families. In this State the system of crop loan has been in operation for some years past and the working of the system has showed that so far as short-term credit is concerned the agriculturists have been able to get about 42 per cent. of their total requirements from the co-operative movement.

The Rural Credit Survey Report has emphasised the need for strengthening the co-operative credit movement and its extensive use in preference to any other agency for the benefit of the rural cultivators. It is, therefore, proposed to enable the Co-operative Credit Institutions to reach at least 75 per cent. of the cultivating families in the State, with membership of about 24 lakhs by the end of the Second Five Year Plan as against their present membership of about 10 lakhs, and to provide about Rs. 35 crores of short-term credit at the rate of Rs. 140 per member (as against Rs. 100 at present). The Scheme also envisages provision of Rs. 7 crores as medium-term loans and Rs. 4 crores as long-term loans to the agriculturists. The movement is expected to provide from its own resources Rs. 18 crores of short-term finance, Rs. 2 crores of medium-term finance and Rs. 3 crores of long-term finance. The balance requirements of Rs. 17 crores of short-term finance, Rs. 5 crores of medium-term finance, and Rs. 1 crore of long-term finance are expected to be provided by the Reserve Bank to the movement direct through the Apex Bank and the Central Financing Agencies.

In order to sustain a credit programme of this order, it is proposed to reorganise and strengthen the existing structure of the credit institutions at all levels as under :—

(*i*) Organisation of large sized primary units by amalgamation of existing small sized primary units and by establishment of new ones wherever necessary. These are intended to be organised on multipurpose lines, which will not only cater to the needs of finance of the cultivators but also pool their agricultural produce and arrange to sell it through co-operative marketing organisations, arrange for supply of agricultural requirements, such as fertilizers, agricultural implements, seeds, etc. and other household necessities such as sugar, kerosene, etc.

(*ii*) Financial strengthening of the primaries by augmentation of their share capital through Government provided funds to the extent of Rs. 2·50 crores in order to raise their capital resources to about Rs. 10·50 crores to enable them to borrow about Rs. 31·50 crores which with their own resources of Rs. 8 crores will enable them to advance Rs. 35 crores of short-term and Rs. 7 crores of medium-term finance.

(*iii*) Organisation of 4 new district Central Banks and reorganisation of the existing ones and strengthening their financial resources by contribution through the Apex Bank to their share capital to the extent of 51 per cent. of their capital.

(*iv*) Augmenting the resources of the Apex Bank by participation in the share capital to the extent of 51 per cent. and providing to it the necessary additional funds for participation in the share capital of the Central Financing Agencies and the primary societies.

(*v*) In the sphere of long term credit, organisation of 3 more primary land mortgage banks and augmenting the resources of the apex land mortgage bank with 51 per cent. share capital and granting to it temporary cash credit facilities to the extent of Rs 25 lakhs.

To popularise reorganisation on the desired lines, the scheme contemplates the grant of subsidies for specified purposes. The expansion of the movement as envisaged above is expected to necessitate a considerable increase in the audit staff of the Department and the scheme makes provision for the additional expenditure on this account.

The scheme is likely to give employment to about 450 individuals by way of increase in the departmental staff and the employment of managerial and clerical staff etc. by the co-operative institutions.

The total cost of the scheme is estimated at Rs. 85·81 lakhs (excluding contribution to share capital amounting to Rs. 400 lakhs which is to be made available by the Reserve Bank of India.)

SCHEME NO. 119.

Name of the Scheme.—**Relief and Guarantee Fund for Extension of Crdit.**

Recurring	... Rs.	30,00,000	Non-recurring	... Rs.	*Nil.*
Total	... ,,	30,00,000	Ultimate annual recurring	,,	6,00,000

Remarks.—One of the recommendations made in the Rural Credit Survey Report is regarding the creation of the Agricultural Credit Relief and Guarantee Fund by the Central and State Governments to under-write some of the risks that the Co-operative Credit Institutions are likely to take in expanding the credit supply as envisaged in the Report. The present outstandings on account of agricultural finance are about Rs. 12·50 crores. These outstandings will increase from year to year owing to the expansion contemplated during the Second Five Year Plan. It is proposed that the State Government might make an annual contribution of Rs. 6 lakhs to this Fund in each year of the Second Plan period . A total provision of Rs. 30 lakhs on this account is proposed to be made in the Second Five Year Plan.

SCHEME NO. 120.

Name of the Scheme.—**Organisation of Grain Depots.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	12,50,000
Total	.. ,,	12,50,000	Ultimate annual recurring	.. ,,	*Nil.*

Remarks.—The object of the scheme is to give relief to all the Backward Class people, including the Adiwasis, who are mostly engaged in agriculture, and who have no source of income after the completion of transplantation work, i.e. during the months of August and September, each year. Under this Scheme, the Agricultural Credit and Multi-purpose Societies will provide grain to those Backward Classes during these two months by opening and managing grain depots at suitable centres. There are at present 38 grain depots in this State. It is proposed to organise 250 such additional depots during the period of the Second Five Year Plan. The societies will supply through these depots grain as a loan to the Backward Class people during August and September when they are in short supply. These grain loans will be recovered during the harvesting season. It is expected that each grain depot would require about 400 Bengali maunds of grains for the purpose. An amount of Rs. 12·50 lakhs will be required for advancing loans to the societies for enabling them to undertake distribution of grains through the grain depots out of which an amount of Rs. 6·25 lakhs will be the share of the Central Government by way of loan. The loan will carry interest at the rate of 4½ per cent. per annum and will be repayable in 10 years.

Scheme No. 121.

Name of the Scheme.—**Co-operative Farming.**

Recurring	.. Rs. 10,35,000	Non-recurring including Rs. 2,80,000 as non-recurring subsidy.	..	Rs. 36,15,000
Total	.. „ 46,50,000	Ultimate annual recurring	..	„ 2,07,000

Remarks.—The scheme for organisation of Co-operative Farming Societies is already under implementation in this State for the last six years, and as many as 303 Co-operative Farming Societies of three different types, viz., Joint, Tenant and Collective have been registered in the State up to 30th June, 1955. These societies have a total membership of 10,902 persons and cover an area of 83,107 acres of land.

The objective of the Scheme is to settle landless labourers on free lands and to enable existing cultivators pool their lands for increasing their productivity. More emphasis is proposed to be laid on the latter objective. With the impending conferment of ownership on tenant and with the ceilings on holdings, it would be both possible and necessary to organise a number of Joint Farming Societies if the disadvantages of resourceless owners cultivating sub-standard holdings are to be neutralised. Fifty such societies are contemplated, and with another 50 societies for the purpose of settlement, 100 societies in all are expected to come into being.

Apart from the new societies proposed to be organised as above, it is intended to select within the period of the Plan and from among the societies both existing and those to be newly organised, about 25 societies for intensive development so that they can serve as models for the other societies to emulate. The most important feature of the scheme would be to ensure that these selected societies secure the best possible managerial assistance so that they do not have to suffer from defects of management. They will also receive additional loan assistance wherever necessary.

It is proposed to grant financial assistance to these Co-operative Farming Societies by way of loan and subsidy for different purposes such as reclamation and development of land, cattle-sheds and godowns, purchase of seed, manure implements, bullocks, etc. managerial cost and contributions towards share capital.

The details of the cost and the shares of the Centre and the State on account of the scheme are given below :—

Break up of the cost

Particulars	Total cost (Rs. in lakhs)	Government of India's share (Rs. in lakhs)	State Government's share (Rs. in lakhs)
1. Loans	27·75	13·88	13·87
2. Contribution to share capital	5·60	2·80	2·80
3. *Subsidies*—			
Non-recurring	2·80	1·40	1·40
Recurring	8·30	4·15	4·15
4. Staff	2·05	......	2·05
Total ...	46·50	22·23	24·27

SCHEME No. 122.

Name of the Scheme.—**Co-operative Lift Irrigation.**

Recurring cost ...	Rs.	7,15,000	Non-recurring (of which subsidy towards capital cost is Rs. 8,20,00).	Rs.	35,30,000
Total ...	,,	42,45,000	Ultimate annual recurring ...	,,	1,43,000

Remarks.—In June 1949, Government sanctioned a scheme of financial assistance to co-operative societies undertaking lift irrigation schemes. Under the stimulus of financial aid, already 300 co-operative lift irrigation schemes with a command area of 72,000 acres have been formed of which 200 schemes with a command area of 30,348 acres have actually been completed.

It is proposed to continue this activity during the period of the Second Five-Year Plan with the scales of assistance slightly revised and with emphasis more towards development of schemes already formed rather than on the organisation of a large number of new schemes. During the Second Five-Year Plan, it is proposed to organize 25 new schemes with a total command area of about 5,000 acres and to complete all the part-complete schemes. It is also proposed to provide certain additional facilities to these societies existing as well as new ones, such as provision of additional loans to serve as working capital and to have certain additional establishment both technical and administrative to ensure adequate and efficient supervision and guidance for the co-operative lift irrigation schemes.

The scheme is expected to provide employment to about 350 persons by way of increase in departmental staff and new employees in the schemes which would get completed during the Second Five-Year Plan period. Additionally, there will be employment of various types in construction activities worth about Rs. 7·10 lakhs and in the work of installation of machinery worth about the same amount. The total cost of the scheme is Rs. 42·45 lakhs the break-up of which is as shown below :—

Break up of the cost

		(Rs. in lakhs.)
Staff		5·17
Loans		27·10
Subsidy—		
Recurring	1·98	
Non-recurring	8·20	
		10·18
Total ...		42·45

The shares of the Central and State Governments are as shown below :—

Name of the item	Government of India's share	State Government's share	Total	Remarks
1. Staff	......	5·17	5·17	Share between Government of India and the State Government is in the ratio of 50 : 50. The cost of the staff is to be borne entirely by the State Government.
2. Loans ...	13·55	13·55	27·10	
3. Subsidy recurring ...	0·99	0·99	1·98	
4. Subsidy non-recurring ...	4·10	4·10	8·20	
Total ...	18·64	24·81	42·45	

SCHEME No. 123.

Name of the Scheme.—**Co-operative Fisheries.**

Recurring ... Rs. 1,17,000 Non-recurring ... Rs. 10,00,000

Total ... ,, 11,17,000 Ultimate annual recurring ,, 23,000

Remarks.—Fisheries is an important industry and affords livelihood to a large population, particularly in coastal areas. The fishermen as a class are backward and need special attention. Their co-operative societies will be given short term and long term loans as well as subsidies for their management expenses. The

Director of Fisheries will make available long term loans for mechanisation of fishing crafts, etc. and the Co-operative Department will make available only short-term loans to the extent of Rs. 10 lakhs for domestic requirements and operational requisites. The societies will be given subsidy towards managerial cost which would come to Rs. 99,000 during the Plan period. The establishment cost will amount to Rs. 18,000. The shares of the Central and State Governments are as shown below :—

	Government of India (Rs. in lakhs)	State Government (Rs. in lakhs)	Total (Rs. in lakhs)
Loan	5·00	5·00	10·00
Subsidies	0·50	0·49	0·99
Staff	......	0·18	0·18

SCHEME Nos. 124–125.

Name of the Scheme.—**Organisation of Co-operative Processing Societies (other than Sugar Factories) and Fruit and Vegetables Societies.**

Recurring cost ...	Rs. 4,00,000	Non-recurring ...	Rs. 45,50,000
Total. ...	,, 49,50,000	Ultimate annual recurring	,, 80,000

Remarks.—In this State agricultural commodities that have so far been processed on co-operative basis to some extent are cotton and oil seeds. In accordance with the recommendations of the Rural Credit Survey, it is proposed to concentrate on processing of cotton on co-operative basis and to extend the scope of co-operative processing to other commodities, viz., chillies and isabgul.

There are at present 16 co-operative cotton ginning and pressing societies. The Plan envisages organisation of 18 more co-operative ginning and pressing societies, 1 isabgul processing society and 2 chilly powdering societies. It is also proposed to establish 2 cold storage plants at important consuming centres and 10 small sized canning factories for preservation of fruits in areas where fruits are largely grown. The scheme contemplates financial assistance to such societies in the following manner :—

(*i*) Participation in the share capital to the extent of 50 per cent. in societies other than fruit preservation and canning societies.

(*ii*) Grant of loans and subsidies towards the capital cost of the preservation plants for canning and preservation.

(*iii*) Subsidies at prescribed scales towards management costs in the initial years.

About 1,850 persons are likely to be employed by the processing societies and ginning and pressing societies including the labour for ginning and pressing societies both in the construction and the continuing stages.

Details of the cost of the Scheme are as shown below :—

	(Rs. in lakhs.)
Expenditure on staff	0·65
Loans	8·25
State contribution towards share capital	37·00
Subsidy—	
(*i*) Non-recurring	0·25
(*ii*) Recurring	3·35
Total ...	49·50

The share of the Central and State Governments is as shown below :—

(Rs. in lakhs.)

Name of the Item	Government of India's Share	State Government's Share	Total
Staff	......	0·65	0·65
Loans	4·13	4·12	8·25
State contribution towards share capital ...	18·50	18·50	37·00
Subsidy—			
(*i*) Non-recurring	0·13	0·12	0·25
(*ii*) Recurring	1·68	1·67	3·35
Total ...	24·44	25·06	49·50

SCHEME No. 126.

Name of Scheme.—**Organisation of Milk Producers' Societies and Unions.**

Recurring	.. Rs. 3,04,000	Non-recurring (out of which subsidy towards capital cost—Rs. 35,000).	.. Rs.	4,83,000
Total	" 7,87,000	Ultimate annual recurring	"	60,800

Remarks.—**Government sanctioned a scheme for organisation of 4 Milk Producers' Unions for organising milk supply on a co-operative basis and for catering to the cities of Surat, Kolhapur, Belgaum and Nasik. Government granted financial assistance to such Unions by way of loans and subsidies towards capital cost and subsidy at certain prescribed rates for meeting initial management expenses.**

In the Second Five-Year Plan, it is proposed to organise new Unions to cover other cities and also to develop the existing ones. The Scheme envisages organisation of 4 federal bodies to which 40 milk producers' societies would be affiliated and also organisation of 8 milk unions to which 40 feeders' societies would be linked up. The Federations would act as liaison agencies between Government (including Municipal Corporations) and co-operatives where the former operate schemes for the receiving and distribution of milk, while the milk unions are intended to serve as distributing agencies themselves. Each Milk Union is expected to handle about 4,000 lbs. of milk daily to begin with on the basis of 800 lbs. per feeder societies. The Scheme envisages assistance on the following lines to the Federations and their affiliated Units as also for the Milk Unions and their feeder societies.

	Loan	Subsidy	Total
	Rs.	Rs.	Rs.
(1) Federal body	......	10,000	10,000
(2) Feeder affiliated to federal body ...	5,975	3,725	9,700
(3) Milk Unions	23,125	10,975	34,100
(4) Feeder Societies to Milk Union ...	375	3,725	4,100

The scheme is expected to cost Rs. 7·87 lakhs as shown below :—

	Rs.
1. Loan	4,48,000
2. Non-recurring subsidy towards capital costs ..	35,000
3. Recurring subsidy	2,14,000
4. Staff	90,000
Total ..	7,87,000

Of the total cost of Rs. 7·87 lakhs, it is expected that Government of India will bear Rs. 3·49 lakhs, being half the cost of the scheme, expecting the cost on account of the additional staff as shown below :—

	Government of India's share	State Government's share
	Rs.	Rs.
1. Loan	2,24,000	2,24,000
2. Non-recurring subsidy	17,500	17,500
3. Recurring subsidy	1,07,000	1,07,000
4. Staff	..	90,000
Total ..	3,48,500	4,38,500

Scheme No. 127.

Name of the Scheme.—**Organisation of Co-operative Electricity Production Societies.**

Recurring	. **Rs. Nil.**	**Non-recurring** **(of which subsidy towards capital cost is**	**Rs. 16,41,000** **Rs. 2,40,000).**
Total	.. **" 16,41,000**	**Ultimate annual recurring.**	**" Nil.**

Remarks.—In certain parts of the State, not served by the Bombay Electricity Board there are possibilities of organizing Co-operative Electricity Production Societies, which, in addition to providing for lighting purposes in urban and rural areas, could also provide electricity at economic rates as motive power for irrigation purposes. The additional capital cost involved in installation of additional electrical generators, supply lines, transformers, etc., for irrigation purposes is generally very high and it becomes usually difficult to supply electricity at economic rates to cultivators for agricultural purposes. The scheme consists in assisting these societies as follows :—

(*a*) Loan up to 1/3rd of the capital cost of the installations required for generation and supply of electricity for lighting and other purposes in urban and rural areas.

(*b*) Subsidy equivalent to 25 per cent. of the additional capital cost involved for installation of additional equipment for supply of electricity for irrigation purposes.

It is proposed to assist twelve such societies (including four societies already existing) with loan. Eight of these societies which come forward to undertake supply of electricity for irrigation purposes also would be assisted in addition to subsidy as aforesaid.

The scheme would provide employment to about 180 persons and in addition, there will be employment in construction activity also. In the construction phase, 160 persons are expected to be employed. The share of the Central and State Governments is as shown below :—

Name of item	Government of India's share (Rs. in lakhs)	State Government's share (Rs. in lakhs)	Total (Rs. in lakhs)	Remarks
1. **Loans** ...	7·01	7·00	14·01	**Share between the Government of India and the State Government is in the ratio of 50 : 50.**
2. **Subsidies Non-recurring**	1·20	1·20	2·40	
3. **Subsidies Recurring**	Nil	Nil	Nil	
Total ...	8·21	8·20	16·41	

SCHEME No. 128.

Name of the Scheme.—**Rehabilitation of Nomadic Professional Cattle-breeders.**

Recurring .. Rs. 4,48,000 Non-recurring .. Rs. 10,16,000

Total .. ,, 23,64,000 Ultimate annual recurring ,, 90,000

Remarks.—Government has recently sanctioned a scheme for organization of cattle-breeding-*cum*-farming societies to improve the economic and social conditions of the Rabaris and Bharwad communities of Ahmedabad, Mehsana and Kaira Districts. This scheme envisages organisation of societies professional cattle-breeders for settling them on land and assist them through the societies to carry on their traditional profession without having to be nomadic. Twenty-two such societies are likely to be organised during 1955-56. It is proposed to continue the Scheme under the Second Five-Year Plan and to extend its benefits to all professional cattle-breeders throughout the State. It is also proposed to provide under the scheme for grant of loans to these societies for purchase of lands in suitable cases. 56 such societies are intended to be organised during the period of the Second Five-Year Plan. For such cattle-breeders who are already settled on land, 40 special multi-purpose societies are also proposed to be organised and the multi-purpose societies will get financial assistance from Government by way of share capital contribution and by way of loans and subsidies for godowns and also by way of contribution towards managerial expenses.

The total cost of the scheme to Government will be to the extent of Rs. 23,64,000 for the Plan period, as detailed below :—

	Rs.
Share capital contribution	6,24,000
Loan	10,84,000
Non-recurring subsidy	2,08,000
Recovery subsidy	4,09,000
Additional staff cost	39,000
	23,64,000

The distribution of the cost between the Centre and the State is indicated below :—

	Centre	State	Total
Share of capital contribution ..	3·12	3·12	6·24
Loan	5·42	5·42	10·84
Non-recurring subsidy ..	1·04	1·04	2·08
Recurring subsidy	2·05	2·04	4·09
Additional staff cost	..	·39	·39
	11·63	12·01	23·64

SCHEME No. 129.

Name of the Scheme.—**Subsidised Industrial Housing Scheme.**

Recurring	.. Rs.	56,000	Non-recurring	.. Rs.	Nil.
Total	.. "	56,000	Ultimate annual recurring	"	11,200

Remarks.—The Government of India has sanctioned in 1952 a scheme for housing the industrial workers. Under this scheme, the Government of India gives financial assistance through the State Government to Housing Societies of Industrial Workers. In the case of Co-operative Societies of Industrial Workers, loans to the extent of 50 per cent. of the prescribed estimated cost of the houses and subsidies to the extent of 25 per cent. of such cost are made available by the Central Government. So far, 33 housing societies have been organised and are being financed in this State, and it is proposed to organise and/or finance 34 more such societies during the period of the Second Five-Year Plan. These societies are expected to construct 1,700 tenements. The cost on account of grant of loans and subsidies will be borne by the Government of India. In order to implement this scheme, some additional staff indicated below will, however, have to be appointed in the Co-operative Department, the cost of which is estimated to be Rs. 56,000.

2 Assistant District Co-operative Officers.

2 Senior Clerks.

2 Junior Clerks.

2 Peons.

The non-recurring cost is provided separately under the Head of Development 'Housing'.

AGRICULTURE AND COMMUNITY DEVELOPMENT

(MISCELLANEOUS)

SCHEME No. 130.

Name of the Scheme.—**Scheme for Surveying of Sites for possible National Parks.**

Recurring	... Rs.	12,000	Non-recurring	... Rs.	Nil.
Total	... "	12,000	Ultimate annual recurring.	"	Nil.

Remarks.—Survey is prerequisite to the establishment of National Parks in the State. To implement the scheme for survey of sites for possible National Parks it is proposed to appoint a staff of one Surveyor, one Tracer and four Khalasis for a period of one year under the Second Five-Year Plan. The physical target aimed under the scheme is to survey about 25 sites in this State. The estimated expenditure on this scheme is Rs. 12,000.

Scheme No. 131.

Name of the Scheme.—**Development of Sayaji Bag at Baroda.**

Recurring	... Rs. 10,000	Non-recurring	... Rs. 1,47,000
Total	... " 1,57,000	Ultimate annual recurring	" 7,320

Remarks.—There is a piece of land measuring 75 acres near the Sayaji Bag at Baroda. If this area is developed it would offer facilities to tourists. It is, therefore, proposed to establish a Park at this place at an estimated cost of Rs. 1,57,000. It will also afford facilities for scientific study as an arboretum which is proposed to be established there.

Scheme No. 132.

Name of the Scheme.—**Development of Hot Water Springs at Vajreshwari.**

Recurring	... Rs. 48,000	Non-recurring	... Rs. 2,72,000
Total	... " 3,20,000	Ultimate annual recurring	" 10,000

Remarks.—There are natural hot water springs of high medicinal value at Vajreshwari which are situated amidst a relatively wild and beautiful country rich in landscape and scenic beauty. These springs, therefore, attract a large number of visitors. But the beautiful surroundings are at present in a neglected state. In order, therefore, to preserve the beauty of the area and to develop a recreational and tourist centre for the visitors from the neighbouring localities as also tourists from abroad, it is essential to undertake the development of the surrounding area by providing adequate residential and recreational facilities in the area. For this purpose sufficient land will have to be acquired and one or two motorable roads and a number of winding walks leading to various picnic spots in the area will have to be constructed. It is also essential to construct a few tourist cabins. A few wells will also have to be dug wherever necessary for providing drinking water. The tourist cabins will offer facilities both for week-end and long sojourns to middle class people who cannot afford the luxury of hill stations.

Scheme No. 133.

Name of the Scheme.—**Establishment of a National Park at Sinhagad.**

Recurring	... Rs. 78,000	Non-recurring	... Rs. 6,42,000
Total	... ,, 7,20,000	Ultimate annual recurring	,, 10,000

Remarks.—Sinhagad Fort is a place of a great historical importance and is situated in the centre of beautiful wild country. The climate of this area is very pleasant and it would be worth while developing this site as a tourist centre. If a National

Park is established at this ideal place, it will help in attracting tourists from other parts of the country. In view of the above facts it is proposed to establish a National Park at the Sinhagad Fort at an estimated cost of Rs. 7,20,000 (Rs. 78,000 recurring and Rs. 6,42,000 non-recurring). The work consists of acquisition of land, construction of roads and buildings on the top, water arrangements, erecting a rock cut image of Shivaji, aftorestation of the area and prevention of soil erosion.

SCHEME No. 134.

Name of the Scheme.—**Establishment of a National Park at Elephanta Island.**

Recurring	... Rs.	48,000	Non-recurring	...	Rs.	4,23,000
Total	... ,,	4,71,000	Ultimate annual recurring		,,	10,000

Remarks.—Since the inception of the Department of Parks and Gardens, only one National Park has been established at Borivli, around the Kanheri Caves. There are several other important places in this State which have either archæologial geological or historic importance which can be developed into National Parks, recreation fields, holiday homes, health resorts etc. Among these the Elephanta Island lying within an hour's run by boat from Bombay is very famous for its caves (archæological features). The area can be developed into a National Park for which it is proposed to acquire 80 acres of land during the Second Plan period. There are a few existing structures which require remodelling. The road leading from the jetty requires reconstruction and it is also necessary to establish a few tourist cottages etc. The rent of tourist cabins will be a source of income to Government. The total expenditure on account of development of the area and construction would be Rs. 4,23,000 (non-recurrent) and Rs. 48,000 (recurring) over five years. The details of the expenditure are given below :—

Non-recurrent—	Rs.
Cost of land and existing buildings	27,000
Remodelling existing building and constructing new ones for tourists cottages (Cabins)	1,00,000
Construction of road	1,50,000
Provision of amenities in the recreation centre ...	1,23,700
	4,20,700

Establishment—	Rs.
1 Park warden	1,800
2 Malis	2,560
1 Sweeper Rs. 30—½—35 city	780
2 Chowkidars Rs. 30—½—35 mofussil	1,920
Contingencies	3,000
	10,060 × 5
Total ...	4,71,000

SCHEME No. 135.

Name of the Scheme.—**Development of Landscape around Hotwater Springs at Unai (Surat District).**

Recurring	... Rs.	10,000	Non-recurring	... Rs.	3,04,000
Total	... „	3,20,000	Ultimate annual recurring	„	10,000

Remarks.—The hot water springs at Unai (Surat District) is a geological feature of great importance. The spring water has great medicinal value and the place is visited by a large number of picnickers and hickers. It is very necesary to preserve and protect this spring by developing the area into a National Park or Public Park under Section 4 of the Bombay National Park Act. It is also essential to develop the surrounding area by providing accommodation and communication facilities to the tourists, thus making it an ideal tourist centre.

SCHEME No. 136.

Name of the Scheme.—**Additional requirements of or expansion of existing Nurseries.**

Recurring	... Rs.	30,000	Non-recurring	... Rs.	1,27,000
Total	... „	1,57,000	Ultimate annual recurring.	„	3,000

Remarks.—At present there are no organised State Nurseries in the Bombay State. Experience has shown that reliable seeds and ornamental plants true to type are not available to the public at reasonable rates from the private nurseries. The main reason for the poor quality of seeds is that no established nursery is producing seeds on scientific lines.

Hence with a view to providing reliable seeds, plants etc. to the garden loving public, various Departments of Government, etc. at reasonable rates, it is proposed to establish a Central Nursery at the University Park, Poona and Regional Nurseries at Himatnagar and Kolhapur. A number of plants will be collected and propagated and catalogues will be printed and published. Once the nurseries are well established, it is also proposed to carry out research on breeding, cultivation and propagation problems in ornamental plants. Efforts will also be made to carry out new varieties and isolating chance seedlings and bad mutations and thus increasing the number in variants.

An expenditure of Rs. 1,57,000 is proposed to be incurred on this scheme during the period of the Second Five Year Plan.

IRRIGATION AND POWER.

(MULTI-PURPOSE PROJECTS).

SCHEME No. 137.

Name of the Scheme.—**Koyna Project —Stage I and Koyna-Sholapur Extension Scheme.**

Recurring	... Rs.	Nil.	Non-recurring	... Rs.	32,00,00,000
Total	... ,,	32,00,00,000	Ultimate annual recurring	,,	Nil.

1. *Koyna Project—Stage I.*

Remarks.—The first stage of this project estimated to cost Rs. 3321·67 lahks was included in the First Five Year Plan and construction was started in January 1954. As per present construction programme, a major portion of the work is expected to be completed by June 1961.

The works are situated in the Helwak-Pophali area by the side of the Karad-Chiplun road about 160 miles to the south of Bombay as the crow flies. The site is approachable by rail *via* Karad on the Poona-Bangalore section of the Southern Railway or by sea *via* Dabhol Port on the Western Coast.

Rising on the Western Slopes of the Mahableshwar Plateau in the Western Ghats of Bombay State the Koyna river offers one of the most attractive sites available for development of cheap hydro-electric power and for providing storage for irrigation. The Eastern foot of the Ghats which is located North-South is at an elevation of 1000 to 2000 feet above mean sea level. The Western face of the ghats has steep slopes ending at the ground level of about 500 feet. This drop of about 1500 feet between the two sides of the ghats together with a catchment area of 346 sq. miles receiving an average annual rainfall of over 200 inches in the Koyna valley provides a high potential for a hydro-electric scheme at a moderate cost. The average yield available from the catchment area is of the order of 140,000 m.cft. but according to the decision arrived at in the inter state conference in 1951 only 67,500 m.cft. water is allowed to be diverted to the west of the Ghats for power generation and this has limited the scope of the project. This diversion will be effected in two stages. The first stage now taken up provides for a storage of 36,045 m.cft. obtained by constructing a dam of about 207·5 ft. above the river bed. All this storage will be utilised for power-generation of about 240,000 Kwts. as described below.

Bombay, the premier city in India, has overgrown its pre-war capacity in population and industrialisation. The power shortage in this highly industrialised area has become extremely acute during the last few years and immediate measures are needed to remedy the situation. The first stage of this project offers a suitable source of power which can supply the needs at a reasonably low cost and in a progressively expanding measure. The rural areas of the Bombay State are also awake to regional industrialisation and are clamouring for cheap power.

Certain areas in the Sourthern part of the State are periodically famine-striken owing to frequent failure of the monsoons. These areas need an assured supply of water for irrigation and cheap power for lift irrigation. These needs will be met within the second and third stages of this project.

Though the preliminary surveys and investigations were taken up in 1946 the actual construction work was started in January 1954, and preliminary works like buildings, roads, water supply and drainage, electric power supply for constructional purposes, acquisition of machinery and such other works are in progress. Excavation in overburden for the foundation of the dam has also been taken up. The construction of the dam and the underground works will be taken up from the next season.

By the end of the First Five Year Plan it is estimated that about 4 crores of rupees will have been spent out of the total estimated amount of 33·22 crores.

The first stage included in the Second Five Year Plan, aims at enough storage to enable installation of four effective machines of 60,000 Kwts. at 60 per cent. load factor each. This power will be utilised principally in the Bombay area and only about 10,000 Kwts. in the Maharashtra districts adjoining the project site. All under-water installations and other works which will become inaccessible have, however, been designed to fit the final development. Necessary sluices have also been provided for irrigation in the Second State and hydro-electric pipes for seasonal power in the third stage.

The water storage is obtained by a composite dam with concrete in the central portion and masonry over concrete foundations as may be found suitable in the flanks, and the necessary appurtenances.

The dam in the 1st stage will be nearly 207·5 ft. above the river bed and 265 ft. above the foundations at the deepest section.

Water for power generation will be carried by a head race tunnel, 21ft. diameter concrete lined, about 12,000 ft. long with the necessary intake channel and works, and terminating in a surge shaft thence, through steel lined 10′ / 8′-6″ diameter pressures shafts driven through rock, each shaft to serve two machines, of 60,000 Kw. each through 75″ Penstock lines.

The power house is located underground and so is the transformer hall, and valve house excess being provided through an approach tunnel, the tail water will be discharged into Vashisti river through a free flow concrete lined tunnel, 24 ft. horse-shoe and about 6,700 ft. long. Necessary cable tunnels, ventilation shafts and switchyard etc. will also be provided.

At Bombay, the Koyna Power System will be tied into the existing Tata-Central Railway inter-connected system including the Bombay Government Steam Plant at Chola. As hydro power from the Project becomes progressively available, thermal plant of equal capacity is proposed to be withdrawn from service. The thermal plant will, however, be maintained in addition for use and meeting conditions on monsoons failure, drought and similar other unpredictable occurrences. In Maharashtra, the small grid is expected to be a forerunner of industrial development of that region.

For the purposes of accessing the financial returns, an average of 0·4 annas per Kwt. has been assumed as a reasonable rate. Based on this rate the scheme will show profit from the third year of operation and yield a return of about 5½ per cent. on the invested capital from about the sixth year of service.

More power will be made available in the later stages of the Koyna Development briefly indicated below, which will, however, be taken up as the demand for power develops.

Stage II.

Widening and raising of the dam to final section and to a full height of 270′ above the river bed so as to store 97,500 m.cft. to permit full utilisation of 6,7500 m.cft. net for power generation and 28,000 m.cft. for irrigation supplies. The generating capacity will be increased to 410,000 Kwts. This increased supply will be made available to the Maharashtra and Karnatak areas for rural electrification and industrialisation and lift irrigation purposes and also for meeting further demands of the Bombay area.

Stage III.

Installation of tail race underground power house with necessary conduits and tail race and also the installation of a power house at the foot of the dam in order to utilise the irrigation water for season power generation. The power derivable from the tail race plant would be about 60,000 Kwt. and that from the plant at the toe of the dam about 30,000 Kw. seasonal i. e. 500,000 Kw. in all. This additional power will be utilised to meet the additional demands as and when they arise.

A provision of Rs. 29 crores has been made in the Second Five Year Plan for completion of Stage I of the Koyna Project.

(2) *Koyna-Sholapur Transmission Scheme.*

Bombay State roughly comprises three zones—

(*i*) Northern zones including towns of Surat, Baroda, Ahmedabad etc.

(*ii*) Central zone including Bombay, Sholapur, Poona, Satara, Nasik, Jalgaon Bhusawal, Belgaum, Kolhapur, etc., and

(*iii*) Southern zone including Hubli, Dharwar, Gadag, etc.

The Central zone is proposed to be supplied with Hydro Electric Power in the Second Five Year Plan. The Jalgaon and Bhusaval areas are proposed to be covered separately by the Ukai-Khandesh Scheme. Bombay City and surrounding areas up to Poona and Igatpuri are already served by the Tata-Chola network. The Koyna Project is under construction and the first stage of the Project will serve the needs of additional power at Bombay and the undeveloped areas of Karad, Sangli etc. It is proposed to take up a further scheme, Koyna-Sholapur Scheme, in the Second Five Year Plan to cover a part of the Central Zone. This Scheme is estimated to cost Rs. 748·1 lakhs and will distribute power to industrial and rural areas of North Satara, South Satara, Sholapur, Kolhapur, Kolaba and Nasik Districts. The Scheme is divided into three parts, viz, (1) electrification of Sholapur-Satara, Sangli-Miraj, etc., (2) electrification of Kolaba District, (3) electrification of Nasik-Manmad.

Part I—Electrification of Sholapur Satara, Sangli — Miraj etc. Under this part it is proposed to purchase power from Koyna Power Station at 220 KV. It consists of 40 miles of 220 KV. single circuit line from Koyna Power House to Karad, 40 miles of 110 KV single circuit line connecting Karad and Vishram Baug, 40 miles of 110 KV single circuit line connecting Karad and Satara Road, 126 miles of 110 KV double circuit line connecting Karad with Sholapur *via* Pandharpur. In addition to this main transmission lines of about 250 miles of 25 KV, 22 KV and 11 KV lines will also be provided under this scheme. The total cost of this part of the scheme is estimated to cost Rs. 589 lakhs.

Part II—Electrification of Kolaba District.—Under this part power will be purchased from Tata Hydro system at two places, viz. (*i*) Bhira Power House, and (2) Panvel Sub-station. At Bhira Power House power will be purchased at 11 KV voltage and will then be stepped up to 22 KV and 22 KV lines will then be taken to feed Kolaba, Roha, Nagothana, Mangaon, Mhasala, etc. At Panvel Sub-station power is available at 22 KV. From Panvel Sub-station 22 KV lines will be taken to feed Uran, Pen, Alibag, Matheran, Neral, etc.

Part III—Electrification of Nasik and Manmad.—It is proposed to give power supply to Nasik and Manmad. In the Second Five-Year Plan it is estimated that the Railways will be constructing 100 KV lines from Igatpuri to Bhusaval. Under this part it is proposed to tap the proposed 100 KV lines of the Railways at Nasik and Manmad and to supply local loads and the rural loads at these two towns. About 5,000 KW of power will be tapped from the Railways network and in exchange about 5,000 KW of power will be supplied to Railways from the net work on Ukai-Khandesh Scheme at Jalgaon and Chalisgaon.

A provision of Rs. 3 crores only is made for the Koyna-Sholapur Transmission Scheme in the Second Five-Year Plan. Within this provision it will be possible to undertake some work of extension under Part I of the scheme. The work under Parts II and III will be postponed to the Third Plan period.

SCHEME NO. 138.

Name of the Scheme.—**Ukai Project.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 7,50,00,000

Total ... ,, 7,50,00,000 Ultimate annual recurring. ,, *Nil.*

Remarks.—The project envisages construction of a reservoir across Tapi River at Ukai in Surat District. A major part of the lower Tapi Valley Scheme (Stage I), viz., the Kakrapar Weir and Canal Project is already under execution under the First Five Year Plan. The Ukai Project benefits the areas of Surat District which has a rainfall of 30·52" and is affected by scarcity. The percentage of irrigated to sown area is 0·4 per cent. The Ukai Project will provide storage to the Kakarpar Canals System. The Ukai dam has great potentialities for the development of cheap and economical Hydro-electric power. It is understood from the investigations carried out by the Government of India that it is possible to generate about 110 MW of firm power at 60 per cent. load factor. This project will supply electricity to South Gujarat and serve as flood control work. The Project provides irrigation for 391,650 acres for mixed crops or 614,000 acres on seasonal basis. The project has a storage of 2·66 lakhs M.Cft. The cost per M.Cft. of storage comes to Rs. 1,063 and the cost per acre of irrigated area comes to Rs. 587 for mixed crop and Rs. 375 for seasonal crop. A provision of Rs. 7·5 crores has been made in the Second Five-Year Plan for the Irrigation part of the Project. The extension of Power lines for transmission will be taken up later.

IRRIGATION AND POWER

(MAJOR AND MEDIUM IRRIGATION PROJECTS)

A—Major Irrigation Projects

I. *New Works*

The new programme of major irrigation projects in the Second Five-Year Plan consists of the following 9 works. As against the total estimated cost of Rs. 100·73 crores of these projects a provision of Rs. 33 crores has been made in the Second Five-Year Plan. This latter provision includes a provision of Rs. 45·83 lakhs for investigation of new major irrigation projects :—

Name of the Project	Total cost (Rs. in crores)	Five year cost 1956—1961 (Rs. in crores)	Area likely to be irrigated (seasonal acres)
I. *Gujarat*			
(1) Mahi (Kadana Reservoir) Project ...	13·10	5·00	7,51,000
(2) Sabarmati Project	13·12	1·00*	3,94,000
(3) Narmada Project	25·00	3·00	11,57,100
(4) Banas River Valley Project (Dantivada)	7·37	3·00	1,20,000
Total : I ...	58·59	12·00	24,22,100
II. *Maharashtra*			
(1) Vir Dam Project	4·61	4·50	1,43,000
(2) Khadakwasla Project	11·82	3·00	2,04,000
(3) Mula Project	8·39	3·00	2,04,000
(4) Girna Project	8·08	4·00	1,84,000
Total : II ...	32·90	14·50	7,35,000
III. *Karnatak*			
(1) Ghataprabha Project Stage II	9·24	6·50	2,05,000
Total : III ...	9·24	6·50	2,05,000
Grand Total : I, II, III ...	100·73	33·00	33,62,100

***The provision for the Sabarmati Scheme in the Plan is under correspondence with the Government of India.**

The above 9 projects are expected to irrigate an additional area of 33,62,100 acres (as converted to seasonal basis) on completion. The details of the schemes are given below :—

SCHEME No. 139.

Name of the Scheme.—**Mahi Project (Kadana Reservoir Project).**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs. 5,00,00,000
Total	... ,,	5,00,00,000	Ultimate annual recurring.	,, *Nil.*

Remarks.—The Project consists of construction of a reservoir across the Mahi River near Kadana Village of Santrampur Taluka of Panchmahals District at an estimated cost of Rs. 1,310 lakhs. It forms the second stage of Mahi Project and benefits the Kaira and Panchmahals Districts. The proposed Dam would have a storage capacity of 80,000 M. Cft. The cost per M. Cft. of storage comes to Rs. 1,160. The Project provides irrigation for 4,55,000 acres of mixed crops, or 7,51,000 of seasonal crops. The cost per acre irrigated, therefore, comes to Rs. 290 for mixed crops and Rs. 175 for seasonal crops.

SCHEME No. 140.

Name of the Scheme.—**Sabarmati Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	Rs. 1,00,00,000
Total	... ,,	1,00,00,000	Ultimate annual recurring.	,, *Nil.*

Remarks.—The Project envisages construction of a storage dam across the Sabarmati River at Dharoi about 95 miles north of Ahmedabad, at an estimated cost of Rs. 1,312 lakhs. It mainly benefits the areas of Ahmedabad and Mehsana Districts. The average rainfall of these Districts is 12·32″ and 11·22″ respectively. The area is often affected by scarcity. The percentages of irrigated area to sown area in Ahmedabad and Mehsana Districts are 3·4 and 0·6 respectively. The Project contemplates a reservoir of 35,000 M. Cft. and is expected to irrigate an area of 2,74,000 acres of mixed crops or an area of 3,94,000 acres of seasonal crops. Thus the cost per M. Cft. (of storage) comes to Rs. 1,650 and Rs. 475 per acre of irrigated area (mixed) or Rs. 330 per acre of irrigated area (seasonal).

SCHEME No. 141.

Name of the Scheme.—**Narbada Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs. 3,00,00,000
Total	... ,,	3,00,00,000	Ultimate annual recurring.	,, *Nil.*

Remarks.—The Project consists of construction of a weir at Gora at an estimated cost of Rs. 25 crores. The areas benefited by the Project lie in the limits of Baroda and Broach Districts, having an annual rainfall of 23·41″ and 15·01″ respectively. The Districts are often affected by scarcity. The percentages of irrigated area to sown area in these Districts are 0·7 and 0·4 respectively. The Project would irrigate an area of 9,97,500 acres for mixed crops or 11,57,100 acres for seasonal crops. The cost per acre of the area irrigated comes to Rs. 250 for mixed crops and Rs. 216 for seasonal crops.

SCHEME No. 142.

Name of the Scheme.—**Banas Valley Project (Dantiwada Project).**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	3,00,00,000
Total	... ,,	3,00,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The project consists of construction of a dam across the Banas River at Dantiwada for a storage of 10,000 M. Cft. at an estimated cost of Rs. 737 lakhs. The area benefited by this Project lies in Banaskantha and Mehsana Districts and has an average rainfall of 15·64″. The area is often affected by scarcity. The percentages of irrigated area to sown area in these Districts are 0·14 and 0·6 respectively. The Project is estimated to irrigate an area of 1,20,000 acres (seasonal). The cost per M. Cft. stored comes to Rs. 4,340 and the cost per acre of area irrigated would be Rs. 614.

SCHEME No. 143.

Name of the Scheme.—**Vir Dam Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,50,00,000
Total	... ,,	4,50,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The Project envisages construction of a Dam on the Nira River a little down stream of the existing weir at Vir, taluka Purandhar, district Poona, for providing an additional storage for the Nira Right Bank Canal. The storage capacity of the Dam will be 9,400 M. Cft. The cost of the project is estimated at Rs. 461 lakhs. The cost per M. Cft. will, therefore, be about Rs. 4,234. An area of about 99,850 acres (mixed) or 1,43,000 acres as converted to seasonal will be brought under irrigation by the Project. The cost per acre irrigated will be Rs. 462 on mixed crop basis or Rs. 323 per acre on seasonal basis.

The Project will benefit parts of North Satara and Sholapur Districts. The rainfall in these two districts is 36·07″ and 22·89″ respectively and the percentage of irrigated to sown area is 7·5 per cent. and 4·7 per cent. respectively at present. The area is often affected by scarcity.

SCHEME No. 144.

Name of the Scheme.—**Khadakwasla Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	.. Rs.	3,00,00,000
Total	... ,,	3,00,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The Project consists of a Dam on the Mutha River near Khadakwasla, having a storage capacity of about 15,000 M. Cft. This storage will be utilised for irrigation by remodelling the existing Mutha Right Bank Canal to carry a higher discharge and also by extending the canal from mile 69 to mile 100. The Project is estimated to cost Rs. 1,182 lakhs and will bring under irrigation an area of

80,000 acres (mixed crop). This area in terms of seasonals represents 2,04,000 acres. The cost works out to Rs. 4,440 per M. Cft., Rs. 1,261 per acre of mixed crop and Rs. 580 per acre as converted to seasonals.

The Project will benefit Poona District in which the percentage of irrigated to sown area is at present 9·1 per cent. The district receives an annual rainfall of 32·25″. The area is often affected by scarcity.

SCHEME No. 145.

Name of the Scheme.—**Mula Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	3,00,00,000
Total	... ,,	3,00,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The Project consists of a Dam on the Mula River at Vanjarwadi to impound a storage of 22,000 M. Cft. and a Right Bank Canal at an estimated cost of Rs. 839 lakhs and will bring under irrigation an area of 1,37,500 acres (mixed) in Rahuri, Newasa and Shegaon Talukas of Ahmednagar District. The area converted into seasonals represents 2,04,000 acres. The cost works out to be Rs. 2,395 per M. Cft. of storage, Rs. 610 per acre of mixed irrigation and Rs. 237 per acre as converted to seasonals.

SCHEME No. 146.

Name of the Scheme.—**Girna Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,00,00,000
Total	... ,,	4,00,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The Project envisages a Dam on the Girna River at Panzan in Nasik District impounding a storage of 10,000 M. Cft. and a main canal and two branches having a total length of 110 miles. The Project will bring under irrigation an area of about 88,000 acres (mixed). This represents an area of 1,84,000 acres converted to seasonal basis. The Project is estimated to cost Rs. 808 lakhs. The cost works out to Rs. 4,224 per M. Cft., Rs. 919 per acre of irrigation (mixed) and Rs. 439 per acre of irrigation converted to seasonal basis.

The Project will benefit mostly East Khandesh and partly West Khandesh Districts. The percentage of irrigated to sown area in the two districts at present is 0·4 per cent and 1·3 per cent respectively. The annual rainfall is 24·82″ and 20·97″ respectively. The area is often affected by scarcity.

SCHEME No. 147.

Name of the Scheme.—**Ghataprabha Project Stage II.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	6,50,00,000
Total	... ,,	6,50,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—This is a part of the Ghataprabha Valley Development Scheme and consists of a storage Dam at Hadalga in Kolhapur District on the Ghataprabha River, impounding a storage of 32,500 M. Cft. and extension of the Ghataprabha Left Bank Canal from mile 45 to mile 73. The project is estimated to cost Rs. 924 lakhs and will bring under irrigation an additional area of 2,05,000 acres (seasonal) in Belgaum and Bijapur Districts.

The cost works out to Rs. 1,570 per M. C.ft. and Rs. 450 per acre of area to be irrigated.

The percentage of irrigated to sown area in the Belgaum and Bijapur Districts which are to be benefited by this Project is at present 1·6 per cent. and 0·08 per cent. respectively. The annual rainfall of the districts is 34·04" and 20·25" respectively. The area is often affected by scarcity.

II. Projects carried over from the First Five-Year Plan

The following six major irrigation projects were included in the First Five-Year Plan of this State. They were at different stages of execution at the end of the Plan period. An amount of Rs. 10 crores has been provided for their completion during the Second Five-Year Plan period :—

	Name of the Project	Amount required for completion (Rs. in lakhs)
1.	Gangapur Storage Project	101·52
2.	Ghataprabha Left Bank Canal Project	33·96
3.	Mahi Right Bank Canal Project	410·98
4.	Ranand Tank	3·11
5.	Kolchi Weir	6·88
6.	Kakrapara Project	479·83
		1,036·28 or Rs. 10 crores in round.

The details of the schemes are given below :—

SCHEME No. 148.

Name of the Scheme.—**Gangapur Storage Project.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,01,52,000

Total ... ,, 1,01,52,000 Ultimate annual recurring ,, *Nil.*

Remarks.—This Project consists of a Dam at Gangapur on the Godavari River to impound a storage of 5,500 M. C.ft., remodelling of the existing Godavari Canals and Gangapur Canal (Nasik Left Bank Canal) of 24 miles, and will bring under irrigation an area of about 25,000 acres in Nasik District and 20,000 acres in Ahmednagar District. The Project was first approved in 1947 for Rs. 2·24 crores. A revised administrative approval was accorded in 1949 for Rs. 3·34 crores. The Project has been again revised and approved for an amount of Rs. 3,95,97,557.

The work of the Dam proper is practically completed and that of both the canals is in progress. The provision made in the Second Plan is for completion of the project.

SCHEME No. 149.

Name of the Scheme.—**Ghataprabha Left Bank Canal Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	33,96,000
Total	... ,,	33,96,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—This forms the first stage of the Ghataprabha Valley Development Scheme. The Project consists of the Left Bank Main Canal from mile 0·44 and two branches, viz., the North Branch (18 miles) and the Jamkhandi Branch (13 miles). The Project is estimated to cost Rs. 545 lakhs and irrigate an area of 1,20,000 acres in Belgaum and Bijapur Districts.

The earth work of the North Branch is practically completed and that on the main canal and the Jamkhandi Branch is in progress. Out of 140 masonry works 90 are completed and 43 are in progress. Irrigation has already started on the completed portions of the canals.

SCHEME No. 150.

Name of the Scheme.—**Mahi Right Bank Canal Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,10,98,000
Total	... ,,	4,10,98,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—This is the first stage of the Mahi Project. The Scheme was contemplated to irrigate an area of 1·5 lakh acres in Kaira District and was approved administratively for Rs. 4·24 crores. At the time of laying foundation stone Government directed that the Canal should be excavated to carry discharge of 7,000 cusecs, instead of 4,000 cusecs as originally contemplated. In view of this the cost of the project is going to increase. The project is under revision. In the meantime, in order to have uninterrupted progress on the work, Government has allowed the work to be proceeded with according to the requirements of the revised project. The revised project is expected to irrigate an area of 4,47,000 acres in Kaira District on completion.

SCHEME No. 151.

Name of the Scheme.—**Ranand Tank.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	3,11,000
Total	... ,,	3,11,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The Project consists of an earthen Dam on the River Man in North Satara District and Left and Right Bank Canals. It is estimated to cost Rs. 30·18 lakhs and irrigate an area of about 3,550 acres. The earthen Dam and the Right Bank Canal with all the Cross Drainage Works are completed. Water also has been given for irrigation on the right bank canal for a length of 5 miles. 90 per cent. of the work of the Left Bank Canal is completed. The remaining work which is in progress, will be completed in the Second Plan period.

SCHEME No. 152.

Name of the Scheme.—**Kolchi Weir Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	6,88,000
Total	... ,,	6,88,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The Project consists of a weir on Malaprabha River at Kolchi, in Ramdurg Taluka of Belgaum District and is expected to irrigate an area of about 3,650 acres in Belgaum District.

The Weir work including fixing of paving and railing over Head and Securing Sluices and Key Wall is completed. The work of Head regulator is completed in all respects. Excavation in rock for approach channel is also completed. The work of canal excavation with Cross Drainage Works in the first 4 miles is in progress.

SCHEME No. 153.

Name of the Scheme.—**Kakrapara Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,79,83,000
Total	... ,,	4,79,83,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The part under construction consists of a weir at Kakrapara on the Tapi River and canals in Surat District. It is estimated to cost Rs. 6,26,54,000 but is at present being revised. The project is expected to irrigate an area of 6,52,000 acres of purely monsoon crops in Surat District. The total length of canals and channels is about 850 miles.

The Kakrapur Head Works consisting of Kakrapur Weir and two Head Regulators, main canals and afflux bunds are completed. As regards canals the Chaltan and Surat Branch Systems are completed. On the Left Bank Main Canal excavation for the first 13 miles is completed and further excavation is in progress.

B—Medium Irrigation Projects.

I. *New Works.*

The programme of new medium irrigation works in the Second Five-Year Plan comprises eight projects costing in the aggregate Rs. 11·90 crores, inclusive of a provision of Rs. 4·17 lakhs for investigation of new medium irrigation projects, during the period of the Plan. These projects are expected to irrigate an area of above 3,21,000 acres on completion. All these projects, except the Gangapur Project, Stage II, would provide seasonal irrigation. The Gangapur Project would provide both perennial and seasonal irrigation. All the projects are located in districts which are affected by scarcity. The details of the schemes are given below.

SCHEME No. 154.

Name of the Scheme.—**Saraswati River Scheme.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,50,00,000

Total ... ,, 1,50,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—This project would be undertaken to irrigate 45,000 acres of land in the Mehsana District at a total estimated cost of Rs. 150 lakhs. The cost per acre would be Rs. 330.

SCHEME No. 155.

Name of the Scheme.—**Hatmati Reservoir Scheme.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,50,0000

Total ... ,, 1,50,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—This project would be undertaken to irrigate an area of 79,600 acres in the Sabarkantha District at a total estimated cost of Rs. 150 lakhs. The cost per acre would be Rs. 262.

SCHEME No. 156.

Name of the Scheme.—**Shetrunji Project.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,20,00,000

Total ... ,, 1,20,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—This project would be undertaken to irrigate 19,000 acres of land in the Amreli District at a total estimated cost of Rs. 120 lakhs. The cost per acre works out to Rs. 630.

SCHEME No. 157.

Name of the Scheme.—**Shamalaji (Meshwa Reservoir) Project.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,00,00,000

Total ... ,, 1,00,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—The project would be undertaken to irrigate an area of 26,400 acres in the Kaira and Sabarkantha Districts at an estimated cost of Rs. 100 lakhs. The cost per acre would be Rs. 400.

SCHEME No. 158.

Name of the Scheme.—**Gangapur Storage Stage II.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	1,70,00,000
Total	... ,,	1,70,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—This project would be undertaken to irrigate an area of 35,000 acres in the Nasik and Ahmednagar Districts at an estimated cost of Rs. 170 lakhs. The cost per acre would be Rs. 485.

SCHEME No. 159.

Name of the Scheme.—**Varna Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	1,60,00,000
Total	... ,,	1,60,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—This project would be undertaken to irrigate an area of 74,000 acres in the Kolhapur and South Satara Districts at a total estimated cost of Rs. 160 lakhs. The cost per acre works out to Rs. 535.

SCHEME No. 160.

Name of the Scheme.—**Kurnur Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	2,60,00,000
Total	... ,,	2,60,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—This project would irrigate an area of 28,000 acres in the Sholapur District at an estimated cost of Rs. 260 lakhs. The cost per acre is Rs. 928.

SCHEME No. 161.

Name of the Scheme.—**Dharma Project.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	80,00,000
Total	... ,,	80,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—This project would irrigate on area of 14,000 acres in the Sholapur District at an estimated cost of Rs. 80 lakhs. The cost per acre is Rs. 571.

II. Projects carried over from the First Five-Year Plan.

For the permanent improvement of scarcity areas in Bombay State a programme of medium irrigation works costing in the aggregate Rs. 4·87 crores was sanctioned by the Government of India. This was financed from the loan from that Government. Under this programme 25 medium irrigation works were started in different parts of the State as additional State schemes under the First Five-Year Plan. At the end of the Plan period they were at different stages of execution. The cost of these schemes has had to be revised with the result that an amount of nearly Rs. 6 crores is now required during the period of the Second Five-Year Plan for completing these works. They are briefly described below :—

SCHEME No. 162.

Name of the Scheme.—**Harnav River Weir Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	5,80,000
Total	... ,,	5,80,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The project, which is Stage I of the entire scheme, consists of construction of a pick-up weir and a left bank canal at Chhapra on the Harnav river, a tributary of the Sabarmati river. The total estimated cost of the scheme (Stage I) is Rs. 26 lakhs. It also includes proposals of remodelling of Patera Tank, Laxmipura and Gota Tanks. The project would benefit about 10,000 acres in the Sabarkantha District. The project has already made substantial progress. It will be completed during the Second Five-Year Plan for which a provision of Rs. 5·8 lakhs is required.

SCHEME No. 163.

Name of the Scheme.—**Constructing a tank at Karol.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	1,55,000
Total	... ,,	1,55,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—This work consists of construction of a Dam near Karol village in the Prantij taluka of Sabarkantha District at an estimated cost of Rs. 5·5 lakhs. The tank will benefit an area of 3,600 acres. A large part of the work has been completed. For completion of the scheme during the Second Five-Year Plan a provision of Rs. 1·55 lakhs is required.

SCHEME No. 164.

Name of the Scheme.—**Moti Fatewadi Canal Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	14,00,000
Total	... ,,	14,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The project is designed to bring 53,000 acres in the Sanand, Dholka and Viramgam talukas of the Ahmedabad District under irrigation at a total estimated cost of Rs. 48 lakhs. A major part of the work is over and the rest will be completed during the Second Five-Year Plan period for which a provision of Rs. 14 lakhs has been made.

SCHEME No. 165.

Name of the Scheme.—**Patadungri Tank Scheme.**

Recurring ... Rs.	*Nil.*	Non-recurring ... Rs.	6,10,700
Total ... ,,	6,10,700	Ultimate annual recurring. ,,	*Nil.*

Remarks.—This project envisages construction of an earthen Dam of 1400 m. cft. across the Khan river, a head regulator and canals in the Dohad taluka of Panchmahals District at a total estimated cost of Rs. 52·63 lakhs. The project on completion would irrigate an area of 12,000 acres. The Dam has already been completed. The head regulators and the canals are at an advanced stage of construction. For completion of the project during the Second Five-Year Plan a provision of Rs. 6,10,700 has been made.

SCHEME No. 166.

Name of the Scheme.—**Bandhara across Heran River.**

Recurring ... Rs.	*Nil.*	Non-recurring ... Rs.	3,15,000
Total ... ,,	3,15,000	Ultimate annual recurring. ,,	*Nil.*

Remarks.—This project consists of construction of a weir, near village Rajmasna a head regulator and canals in the Jabugaon taluka of Baroda District at a total estimated cost of Rs. 9·15 lakhs. The weir and the head regulator have been completed. For completion of the canal works during the Second Five-Year Plan period a provision of Rs.3·15 lakhs has been made. The project on completion would irrigate 5,000 acres.

SCHEME No. 167.

Name of the Scheme.—**Karad Tank Scheme.**

Recurring ... Rs.	*Nil.*	Non-recurring ... Rs.	65,26,700
Total ... ,,	65,26,700	Ultimate annual recurring. ,,	*Nil.*

Remarks.—The project consists of construction of an earthen Dam across the river Kagad near Palla village in Baria taluka of Panch Mahals District at an estimated cost of Rs. 65·26 lakhs. The project on completion will bring an area of 13,000 acres under irrigation. During the period of the Second Five-Year Plan a provision of Rs. 65,26,700 is required for completion of the project.

SCHEME No. 168.

Name of the Scheme.—**Bandhara across Ver River.**

Recurring ... Rs.	*Nil.*	Non-recurring ... Rs.	280
Total ... ,,	280	Ultimate annual recurring. ,,	*Nil.*

Remarks.—The project consists of construction of a bandhara near Godhada across the Ver river together with Left Bank Canal system in the Mandvi Taluka of Surat District at an estimated cost of Rs. 6 lakhs, to bring 4,000 acres under irrigation. The project is nearing completion. During the Second Five-Year-Plan a small provision of Rs. 280 has been made for its completion.

SCHEME No. 169.

Name of the Scheme.—**Raising Doshwada Tank.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	24
Total	... ,,	24	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The scheme consists of raising the existing Dam of Doshwada Tank in the Songad taluka of Surat District by 5 feet at an estimated cost of Rs. 4·25 lakhs to irrigate additional 1229 acres of land. The scheme is nearing completion. During the Second Five Year Plan a small provision of Rs. 24 would be required for its completion.

SCHEME No. 170.

Name of the Scheme.—**Ghod Weir Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	3,50,00,000
Total	... ,,	3,50,00,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The project envisages construction of an earthen Dam near the boundary of the Poona and Ahmednagar Districts at village Chinchani in the Sirur Taluka of Poona District and 54 miles and 19 miles of canals respectively on the left and right banks of the river, at a total estimated cost of Rs. 485 lakhs. The Left Bank Canal on completion would irrigate 55,500 acres in the Shrigonda and Karjat Talukas of Ahmednagar District and 19,500 acres in the Sirur Taluka of Poona District. The catchment area of the river at the site of the weir is about 1,400 square miles. Preliminary works such as excavation, earthwork of embankment, approach roads etc. is in progress. In the Second Five Year Plan a provision of Rs. 350 lakhs has been made for the project.

SCHEME No. 171.

Name of the Scheme.—**Extension of Krishna Canal.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	50,88,700
Total	... ,,	50,88,700	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The project consists of remodelling the existing canal and extending it by 13 miles at a total estimated cost of Rs. 85·88 lakhs to bring an additional area of 5,718 acres in the Karad Taluka of North Satara District and the Walwa and Tasgaon talukas of South Satara District under the command of irrigation. The earthwork and the masonry works are in progress. In the Second Five Year Plan a provision of Rs. 50,88,700 has been made for the project.

SCHEME No. 172.

Name of the Scheme.—**Mosam River Weir Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	14,62,000
Total	... ,,	14,62,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The scheme consists of construction in the Malegaon Taluka of Nasik District of a masonry bandhara across Mosam river having a discharging length of 427 feet, main canal of 200 cusecs capacity for a length of 9½ miles, taking into the

Kanholi Nalla on which it is proposed to have a tail tank at village Manake, and Bank Canal 9 miles in length and 150 cusecs capacity to take off from mile No. 7 bringing the major part of the area between the Canal and the Bombay Agra Road under irrigational command. The project will cost Rs. 69·93 lakhs and will benefit 15,000 acres of land on its completion. At the end of the First Five-Year Plan the earthwork on the main canal was completed and the other works were in progress. In the Second Five-Year Plan a provision of Rs. 14,62,000 has been made for the project.

SCHEME No. 173.

Name of the Scheme.—**Pushpavati Bandhara.**

Recurring	**... Rs.**	***Nil.***	**Non-recurring**	**... Rs.**	**900**
Total	**... ,,**	**900**	**Ultimate annual recurring**	**,,**	***Nil.***

Remarks.—**This project consists of construction of a masonary bandhara across the Pushpavati River at village Netwad in the Junnar Taluka of Poona District and construction of the Right and Left Bank Canals, at a total estimated cost of Rs. 10·09 lakhs. The work on completion is expected to irrigate an area of about 4,000 acres. By the end of the First Year Plan work on the entire length of the bandhara was completed and that on the canals was in progress.**

SCHEME No. 174.

Name of the Scheme.—**Budhial Tank.**

Recurring	**... Rs.**	***Nil.***	**Non-recurring**	**... Rs.**	**15,02,600**
Total	**... ,,**	**15,02,600**	**Ultimate annual recuring**	**,,**	***Nil.***

Remarks.—**The project is located in the Sangola Taluka of Sholapur District and consists of construction of a Dam and a canal 12½ miles in length at a total estimated cost of Rs. 65·14 lakhs. The entire earthwork of the Dam proper and of half the lenth of the canal is completed. An amount of Rs. 15·02 lakhs has been provided for in the Second Five-Year Plan for the project, which on completion would irrigate an area of 8,800 acres.**

SCHEME No. 175.

Name of the Scheme.—**Bandhara on Tarali River.**

Recurring	**... Rs.**	***Nil.***	**Non-recurring**	**... Rs.**	**7,400**
Total	**... ,,**	**7,400**	**Ultimate annual recurring**	**,,**	***Nil.***

Remarks.—**The scheme consists of construction of a bandhara and branch canals on the Tarali river in the Patan taluka of North Satara District at a total estimated cost of Rs. 13·07 lakhs. The scheme on its completion would irrigate 5,600 acres. The Bandhara work has already been completed.**

Scheme No. 176.

Name of the Scheme.—**Bandhara on Urmodi River.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	34,500
Total	... ,,	34,500	Ultimate annual recurring	,,	*Nil.*

Remarks.—The scheme consists of construction of a bandhara and canal over the Urmodi river in the Satara Taluka of North Satara District at a total estimated cost of Rs. 11·34 lakhs. The scheme on its completion would irrigate 4,500 acres. The Bandhara work has already been completed.

Scheme No. 177.

Name of the Scheme.—**Percolation Tank at Bori.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	35,000
Total	... ,,	35,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The scheme consists of construction of a percolation tank at Bori in the Khandala Peta of North Satara District at an estimated cost of Rs. 1·6 lakhs. The work has been nearly completed.

Scheme No. 178.

Name of the Scheme.—**Bandhara at Lakhanpur.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	1,04,900
Total	... ,,	1,04,900	Ultimate annual recurring	,,	*Nil.*

Remarks.—This scheme consists of construction of a road-*cum*-bandhara and a head regulator and channal on the Right and Left Banks at Lakhanpur in the Chikodi taluka of the Belgaum District at a total estimated cost of Rs. 3·65 lakhs. The scheme on its completion would irrigate 4,244 acres. All the work of the Bandhara and the head regulator is completed.

Scheme No. 179.

Name of the Schemes.—**Bandhara at Kalloli.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	800
Total	... ,,	800	Ultimate annual recurring	,,	*Nil.*

Remarks.—The scheme consists of construction of a bandhara across the Hire-Nalla at Kalloli in the Gokak Taluka of Belgaum District and an irrigation channel at a total estimated cost of Rs. 2·76 lakhs to irrigate 3,300 acres. The Bandhara has already been constructed.

SCHEME No. 180.

Name of the Scheme.—**Tank at Ramanhalli.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 23,34,000

Total ... ,, 23,34,000 Ultimate annual recurring ,, *Nil.*

Remarks.—The project consists of construction of tank with a storage capacity of 355·8 m. cft. and a canal of 18 miles in length over the Naoli Nalla at Ramanhalli in the Sindgi Taluka of Bijapur District at a total estimated cost of Rs. 45·34 lakhs. The project on its completion would irrigate 4,800 acres. The work on the tank has been completed and that on irrigation channel and cross-drainage works is in progress.

SCHEME No. 181.

Name of the Scheme.—**Tank at Kalaskop.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 9,78,700

Total ... ,, 9,78,700 Ultimate annual recurring ,, *Nil.*

Remarks.—The project consists of construction of an earthen Dam of a gross storage capacity of 240·83 m. cft. and a canal 9 miles in length over the Yandigeri and Gaudimadu Nallas near Kalaskop in the Bagalkot Taluka of Bijapur District at an estimated cost of Rs. 19·79 lakhs. The project on its completion would irrigate 2,823 acres. The Dam work has already been completed.

SCHEME No. 182.

Name of the Scheme.—**Tank at Hullur.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 10,76,500

Total ... ,, 10,76,500 Ultimate annual recurring ,, *Nil.*

Remarks.—The project consists of construction of a tank with a gross storage capacity of 302·93 m. cft. and a canal 9 miles in length over the Areshankar Nalla in the Bagewadi Taluka of Bijapur District at a total estimated cost of Rs. 20·77 lakhs. The project on its completion would irrigate 3,059 acres.

SCHEME No. 183.

Name of the Scheme.—**Improvement to tank at servey No. 198 at Ganjigatti.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 3,51,000

Total ... ,, 3,51,000 Ultimate annual recurring Rs. *Nil.*

Remarks.—The scheme consists of improvements to the Hirekeri tank at Ganjigatti in the Kalghatgi taluka of Dharwar District at a total estimated cost of Rs. 7·22 lakhs to irrigate 1,284 acres. Nearly half the work is completed.

SCHEME No. 184.

Name of the Scheme.—**Irrigation Tank at Arwatgi.**

Recurring	...	Rs.	*Nil.*	Non-recurring	... Rs.	1,06,000
Total	...	,,	1,06,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The scheme consists of construction of a Dam and irrigation channel at Arwatgi in Dharwar District at an estimated cost of Rs. 3·25 lakhs. The project on its completion would irrigate 740 acres. The Dam has been completed.

SCHEME No. 185.

Name of the Scheme.—**Irrigation Tank at Benchi.**

Recurring	...	Rs.	*Nil.*	Non-recurring	... Rs.	56,300
Total	...	,,	56,300	Ultimate annual recurring.	,,	*Nil.*

Remarks.—The scheme consists of construction of a tank at Benchi in Dharwar District at an estimated cost of Rs. 2·41 lakhs. The project on its completion would irrigate 720 acres. Preliminary works including jungle clearance which were started in 1954 are still in progress.

SCHEME No. 186.

Name of the Scheme.—**Improvements to Tank at Survey No. 202 at Hommardi.**

Recurring	...	Rs.	*Nil.*	Non-recurring	... Rs.	4,23,000
Total	...	,,	4,23,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The scheme consists of extensive repairs to the Tank at Hommardi in the Haveri Taluka of Dharwar District at an estimated cost of Rs. 8·23 lakhs. The tank after its repairs would irrigate 1,818 acres. The earthwork of the tank is nearing completion.

IRRIGATION AND POWER

(POWER PROJECTS)

In order to meet the increasing demand of power for industries as also to provide power to pumping sets and lift irrigation works for agriculture and to domestic consumers, a provision of Rs. 10·43 crores was made in the First Five-Year Plan for the following Power Projects:—

1. Radhanagari Hydro-Electric Project.
2. Kolhapur Emergency Irrigation and City Conversion Scheme.
3. Jog Distribution Scheme.
4. Chola Power Station.
5. North Gujarat Electric Grid Scheme.
6. South Gujarat Electric Grid Scheme.
7. Electrification of Towns and Villages.

Besides these schemes, the Koyna Hydro-Electric Scheme was also included in the Plan. The estimated cost of this project is Rs. 33,21·57 lakhs for the first stage of development. The power that will be developed when this stage is completed is 2,40,000 Kilowats.

The following Major Power Projects are proposed for inclusion in the Second Five-Year Plan :—

	Name of the Scheme		Provision in Second Plan (Rs. in lakhs)
1.	South Gujarat Electric Grid Scheme (Extensions)	...	4,00·00
2.	North Gujarat Electric Grid Scheme (Extensions)	...	64·00
3.	Jog Distribution Scheme (Extensions) ...	...	60·00
4.	Investigation and Survey of Power Projects ...	...	5·00
			5,29·00

A provision of Rs. 371 lakhs has also been made in the Second Five-Year Plan for completing the Power Projects started under First Five-Year Plan as also for completing the Rural Electrification Schemes taken up by the Bombay Electricity Board under the programme for relieving unemployment.

The details of the Major Projects are given below :—

SCHEME No. 188.

Name of the Scheme.—**South Gujarat Electric Grid Scheme—Extensions.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	4,00,00,000
Total	... ,,	4,00,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—With a view to meeting the increasing load demand of the South Gujarat area, it is proposed to extend the South Gujarat Electric Grid Scheme during the Second Five-Year Plan period. It is accordingly proposed to increase the existing installed capacity of the thermal station at Utran by 45,000 KW. Three additional turbo-alternative sets of 15,000 KW each will be installed at the Utran Power Station along with three additional boilers and other ancillary equipment. An extensive network of transmission and distribution lines will be provided from the Power Station to supply power to the needy areas of South Gujarat.

Briefly, the proposed transmission and distribution system will comprise the following :—

(*a*) *Extension of the Utran Step-up Station.*—This will accommodate additional three transformers with switchgear equipment, surge diverters, bus-bars, etc.

(*b*) *Extension to Baroda of 66 KV line* via *Broach.*—This will provide a 66 KV D/C line from Utran to Baroda, *via* Broach, a distance of 81 miles. This line will also interconnect the North and South Gujarat Electric Grid Schemes and will supply part of the North Gujarat load, (*c*) *Providing a sub-station at Broach.*—A new sub-station with 2 transformers and 5 outgoing feeders with associated switchgears, surge diverters, bus-bars, etc. will be set up at Broach. It is proposed to supply 3 H.T. consumers, viz., the Broach Electric Supply Co., the Gopal Mills and the Broach Fine Count Mills. Additional surge diverters, isolators etc. will also be provided at the Baroda sub-station.

(*d*) *Stringing of Second Circuit of the existing Navsari Billimora Section of the 66 KV line.*—With a view to meeting the increased load demand in the South Gujarat area a second circuit is already being strung on the Utran-Navsari Section of the 66 KV Utran-Billimora line. It is also proposed to string the second circuit on the Navsari-Billimora Section.

The total cost of the scheme is estimated at Rs. 4 crores, and the necessary provision has been made in the Second Five-Year Plan.

SCHEME No. 189.

Name of the Scheme.—**North Gujarat Electric Grid Scheme—Extensions.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	64,00,000
Total	... ,,	64,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—Under the North Gujarat Electric Grid Scheme, power is purchased from the Sabarmati Power Station of the Ahmedabad Electricity Co. and is transmitted to the North Gujarat area from Kalol in the North up to Baroda in the South. In view of the increasing demand for electric supply from rural areas, it is necessary to extend the Grid Scheme on the following lines :—

(*a*) Extension to 6 villages in the Dehgam area and electrification of 51 tube wells by means of a 22 KV line from the Barejadi Sub-Station.

(*b*) Power supply to 41 villages in the Gaothan area for domestic agricultural and industrial purposes, by tapping the main feeders in the vicinity.

(*c*) Electrification of villages in the Kalol-Vijapur-Mehsana Zone by constructing a 66 KV line from Sabarmati to Mehsana, a 66/11 KV step-down station at Mehsana, a 11 KV radial system around Mehsana and strengthening the Kalol-Vijapur 11 KV network.

(*d*) Construction of Padra-Jambusar 22 KV line for bulk supply to Jambusar licensee and electrification of 21 towns and villages in the vicinity for domestic, agriculture and industrial purposes.

(*e*) Construction of Baroda-Karjan 22 KV S/C line for facilitating lift-irrigation and industrial development.

(*f*) Construction of 41 miles long Sabarmati-Mehsana 66 KV single Circuit line and increasing the capacity of the existing sub-station at Sabarmati and Baroda.

The total cost on account of these extensions is Rs. 250 lakhs out of which Rs. 64 lakhs are provided under the Second Five-Year Plan.

SCHEME No. 190.

Name of the Scheme.—**Jog Distribution Scheme.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	60,00,000
Total	... ,,	60,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—There is demand for extending the Jog Karnatak Electric Grid Scheme to cater for more loads in the Karnatak region to facilitate industrial development by constructing new transmission lines, extending the existing sub-stations and setting up new ones as detailed below :—

(*a*) Stringing the second circuit of the existing 110 KV single circuit line from Jog to Kavalvad.

(*b*) Construction of a 22 KV single circuit line from Annigeri to Nargund.

(*c*) Construction of an 11 KV single circuit line from Haweri to Bankapur, Savnur and Shiggaon.

(*d*) Construction of an 11 KV line from Hubli to Dhunwad, Kavi, Honnapur *via* Kaden Kop.

(*e*) Extension of sub-stations at Sirsi, Hubli, Kavalvad and Dandeli.

(*f*) Setting up of a new sub-station each at Annigeri on the 33 KV Hubli-Gadag line and at Bankapur on the Harihar-Haveri line.

(*g*) Setting up a KVA transformer at Nargund with three feeder lines to supply H. T. consumers.

(*h*) Supply for H.T. consumers on the Jog-Dandeli-Hubli Section.

The total cost of all these extensions is Rs. 68 lakhs out of which Rs. 60 lakhs are provided under the Second Five-Year Plan.

SCHEME No. 191.

Name of the Scheme.—**Completion of projects started in the First Five-Year Plan.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	3,71,00,000
Total	... ,,	3,71,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—Of the 7 power schemes started under the First Five-Year Plan the Chola Power Station has already been completed and put into commission. The remaining 6 schemes are at different stages of execution. A provision of Rs. 150 lakhs has been made in the Second Five-Year Plan for their completion. In 1954 and 1955 a programme of rural electrification was also sanctioned by Government as a measure of forstalling the unemployment problem. Owing to late receipt of the equipment required for execution these schemes could not make much headway during the First Plan period. It is proposed to complete these schemes during the Second Plan period for which a provision of Rs. 221 lakhs has been made in the **Second Five-Year Plan.**

Scheme No. 192.

Name of the Scheme.—**Investigation and Survey of Power Projects.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 5,00,000

Total ... „ 5,00,000 Ultimate annual recurring „ *Nil.*

Remarks.—The Bombay State has a number of rivers with potentialities for production of electrical power. It is proposed during the Second Five-Year Plan period to investigate and survey some of these rivers which could later be harnessed for power generation. A provision of Rs. 5 lakhs has been made in the Plan for this purpose.

IRRIGATION AND POWER

(Research)

Scheme No. 193.

Name of the Scheme.—**Road-cum-Irrigation Research Institution.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 50,00,000

Total ... „ 50,00,000 Ultimate annual recurring „ *Nil.*

Remarks.—A provision of Rs. 50 lakhs has been made for the research on irrigation problems. The Central Board of Irrigation and Power has suggested that every State should have its own Engineering Research Section. It is accordingly proposed to establish a full-fledged Research Institute of this type in this State. The total cost of the scheme during the period of the Second Plan is estimated at Rs. 65 lakhs. A provision of Rs. 15 lakhs has been made under Road Development for the research on Roads at the Institute.

INDUSTRY AND MINING

(Administrative Staff)

Scheme No. 194.

Name of the Scheme.—**Expansion of the Headquarters' Staff in the Department of Industries.**

Recurring ... Rs. 75,000 Non-recurring ... Rs. 5,000

Total ... „ 80,000 Ultimate annual recurring „ 15,000

***Remarks.*—In order to implement the various schemes included in the Second Five-Year Plan for industrial development, considerable spade work will have to be done by the office of the Director of Industries for working out the details of the**

schemes before these are put into operation. These schemes would also require a good deal of planning and co-ordination. It would be necessary not only to have an effective control and check on the various proposals for expenditure but also to record and watch correctly the progress of the expenditure periodically. It is, therefore, proposed to strengthen the headquarters' staff by providing additional posts during the period of the Second Five-Year Plan as shown below :—

Post	No. of Posts	Pay scale
		Rs.
1. Development Officer	1	350—785
2. Head of Branch	1	170—250
3. Clerks	2	75—200
4. Typist	1	75—200
5. Peon	1	35—40

A provision of Rs. 80,000 is included in the Plan on account of the above staff.

SCHEME NO. 195.

Name of the Scheme.—**Scheme for Collection of Industrial Statistics.**

Recurring	... Rs.	3,79,500	Non-recurring ... Rs.	15,500
Total	... „	3,95,000	Ultimate annual recurring „	75,500

Remarks.—Collection of Industrial Statistics and their compilation are essential for industrial development and its planned progress. Recognising this, the Industrial Statistics Act was passed by the Central Government in 1942 and the Census of Manufacturing Industries Rules, were framed thereunder in 1945. For this purpose, industries are divided into 63 broad categories and at present census returns are being obtained from registered factories using power and employing more than 20 workers in respect of 29 industries only. Thus about 1,600 out of a total of about 7,500 factories furnish the census returns, i.e. only 20 per cent. of the factories are covered so far.

Having regard to the present level of the industrial development of the Bombay State, the greater emphasis being laid on industrial development during the Second Five-Year Plan period and importance attached to the development of small scale industries, it is considered that the collection of census returns from about 20 per cent. of the industrial establishments of the State is inadequate to form a realistic picture of the conditions and visualise the developments necessary. The need to collect such statistics from the remaining industrial establishment of the State is keenly felt so as to fit in with the development plans.

It is, therefore, proposed to collect industrial statistics in suitable manner from (1) the remaining 34 industries by stages (as is done at present in the case of 29 industries) i.e., from factories using power and employing more than 20 workers and (2) collection of statistics at suitable intervals and stages from the remaining factories, i.e., factories not using power and those using power but employing less than 20 workers. It is thus expected that census returns from a large number of registered factories would be obtained. It would also be necessary to ensure regular compilation of the statistics so obtained.

It has, therefore, been decided to take this work during the Second Five-Year Plan and it is proposed to sanction for the same the following additional staff :—

	Post		No. of posts	Pay scale Rs.
1.	Industrial Statistician	...	1	350—785
2.	Senior Industries Inspectors	...	3	160—375 (Mofussil).
3.	Junior Industries Inspectors	...	10	150—225 (Mofussil).
4.	Junior Superintendent	...	1	270—390
5.	Head of Branch	... ...	1	170—250
6.	Noting Assistant	... ...	2	150—230
7.	Clerks	... ...	6	75—140
8.	Steno-typist	...	1	75—140 *plus* speed allowance.
9.	Typists	... ...	2	75—200
10.	Peons	... ...	3	35—40

INDUSTRY AND MINING

(INDUSTRIAL FINANCE)

SCHEME No. 196.

Name of the Scheme.—**State Industrial Finance Corporation.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	31,00,000
Total	... ,,	31,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The State Industrial Finance Corporation has been established with its headquarters in Bombay. The authorized share capital of the Corporation is Rs. 2 crores divided into two lakh shares of the fare-value of Rs. 100 each. Of these one lakh shares have already been issued. Government has subscribed for 31,000 shares and the Reserve Bank of India has subscribed for 20,000 shares. The remaining 49,000 shares have been subscribed by Scheduled and Co-operative Banks, Insurance Companies, Investment Trusts and other financial institutions and private individuals. The Bombay State Finance Corporation is likely to issue the remaining one lakh shares during the period of the Second Five-Year Plan in which case the proportionate shares of Government will be of the order of Rs. 31 lakhs for purchase of 31,000 shares. Accordingly a provision of Rs. 31 lakhs has been made on account of subscription towards the share capital of the Bombay State Finance Corporation in the Second Five-Year Plan period.

INDUSTRY AND MINING

(INDUSTRIAL ESTATES AND TOWNSHIPS)

SCHEME No. 197.

Name of the Scheme.—**Establishment of Industrial Trading Estates.**

Recurring	... Rs.	4,32,300	Non-recurring	... Rs.	71,63,000
Total	... ,,	85,95,300	Plus Loans	... ,,	10,00,000
			Ultimate annual recurring	,,	86,460

Remarks.—In accordance with the industrial policy of Government it was decided to select a number of areas in the State, to begin with, which had adequate supply of labour, raw materials and other pre-requisites necessary for establishment of Trading Estates. The Government of India in the Ministry of Commerce and Industry have also expressed their keenness to establish such estates in different parts of the country mainly to assist the development of small-scale industries. Such estates can be either Government-sponsored institutions managed by autonomous corporations in which industries, banks, etc, can participate or alternatively they are to be established by private institutions, co-operative societies receiving aid from Government in the form of finance, other facilities, etc., preference being given to co-operative enterprise.

Government had appointed a Special Officer in 1948 to suggest suitable sites for location of such estates. As, however, it was found that the cost of development on this account would be considerably large if Government undertook the establishment of such estates it was decided that instead of proceeding with the scheme as state enterprise, private parties may be given all reasonable facilities including loan. Facilities for acquisition of land, etc., were made available to the Belgaum Manufacturers' Co-operative Building Association, Ltd. A loan of Rs. 3 lakhs was also given to the Poona Municipal Corporation to develop an estate at Hadapsar. Government have also spent about Rs. 70,000 for development of Kolhapur Industrial Zone and had made a provision of Rs. 72,000 for further development of the Zone during 1955–56.

It is now proposed to take positive steps and to establish such estates at the following sites or any other sites as may be found convenient :—

Place	Number of Estates
(1) Greater Bombay	2
(2) Atale (near Kalyan)	1
(3) Karad (Koyna area)	1
(4) Baroda	1
(5) Malegaon	1
(6) Mehsana	1
(7) Hubli	1
(8) Angol (Belgaum)	1
Total ...	9

The schemes involve considerable preparatory work, re-selection sites, study of available facilities, reaction of the local public correspodance with various Departments, etc., and other organisational matters. It is, therefore, necessary to provide some staff for this purpose at headquarters in addition to the staff which may be required in respect of each estate separately. It is, therefore, proposed to create a post of one Deputy Director of Industries for this purpose and to provide other staff under him.

The following provision has been made for this purpose during the Second Five-Year Plan period :—

	Rs.
(*a*) Establishment charges at Headquarters and at the Estates.	4,32,300
(*b*) Development Cost	71,63,000
(*c*) Loans	10,00,000
Total ..	85,95,300

INDUSTRY AND MINING

(VILLAGE AND SMALL INDUSTRIES)

SCHEME No. 198.

Name of the Scheme.—**Reorganisation of the Industrial Co-operatives and Village Industries Section.**

Recurring	.. Rs.	**14,63,410**	**Non-recurring**	.. Rs.	**36,700**
Total	.. ,,	**15,00,110**	**Ultimate annual recurring**	,,	**2,92,682**

Remarks.—The Government of India have emphasised the need for rapid development of rural industries on co-operative basis. At present, the work relating to rural industries is being looked after by the Assistant Registrars of Co-operative Societies functioning in each district. These Officers, having been burdened with the duties pertaining to co-operative societies, are unable to do justice to the work pertaining to the Industrial Co-operatives and Village Industries Section. It is, therefore, absolutely necessary to appoint separate district staff to administer the work of this section of the Department. It is proposed to appoint about 13 Assistant Registrars with certain staff under them, a few supervisors and a skeleton clerical staff at the Head Office. As many important schemes are proposed to be implemented during the Second Five-Year Plan period involving heavy expenditure it is also necessary to strengthen the staff at the higher level.

2. The expenditure involved in the appointment of the staff for five years is as below :—

	Rs.
(a) Pay of Establishment	6,10,540
(b) Dearness allowance	2,78,700
(c) House rent allowance and compensatory allowance	56,070
(d) Contingencies—	
(i) Recurring	2,65,500
(ii) Non-recurring	36,700
(e) Travelling allowance	2,52,600
Total ..	15,00,110

3. The following statement shows the provisional shares of the cost to the Central Government and the State Government yearwise for the period of five years :—

Year.	Share of Central Government. Rs.	Share of State Government. Rs.
1st Year	88,119	2,28,439
2nd Year	91,325	1,94,945
3rd Year	94,531	1,98,151
4th Year	97,737	2,01,357
5th Year	1,00,943	2,04,563
Total ..	4,72,655	10,27,455

SCHEME No. 199.

Name of the Scheme.—**Unemployment relief-*cum*-vocational training-*cum*-production centres.**

Recurring	.. Rs. 1,09,30,000	Non-recurring	.. Rs. 20,70,000
Total	.. „ 1,30,00,000	Ultimate annual recurring	„ 27,76,000

Remarks.—In the Tentative Framework of the Second Five-Year Plan it has been stated that an increase in employment opportunities must be regarded as a principal objective—the kingpin—of the Second Five-Year Plan. Employment opportunities may have to be provided not only in times of scarcity when a large part of the population would have to be temporarily absorbed, but also for those agricultural and landless labourers who after the peak of the agricultural employment season have little or nothing to do for the purpose of maintaining themselves. During that period, such agricultural labour should be enabled by means of training and by being actually employed in production activities not only to acquire training in an art which they may pursue later but also to be engaged in gainful occupation.

The target of such employment may be fixed at 7,000 in the whole of the Bombay State. Naturally it will not be convenient for a large number of people to congregate together and work at one place. Bringing together such a large number of people itself would create further problems. Consequently, it is proposed to organise between one or two centres in each district or 40 centres in the whole State, during the Second Plan period, and to provide employment opportunities to about 150 to 200 people in each centre. Of these, some will be of the nature of nucleus labour force who may stick on throughout the year, some will probably be trained and employed for about 6 months, while the remaining may not continue for more than a period of 3 months. Most of these would require training in some industries or the other and the training period would have to be between one month and 8 months depending upon the quality and skill of the unemployed person as well as on the nature of the industry which has to be picked up. A large portion of the products manufactured by these persons would not be saleable at the market price because of the fact that they may not be up to the quality and also because of the fact that during the training period a considerable amount of wastage would result. In those centres which are located nearabout the big industrial cities and towns, attempts will be made to maintain liaison with the large and small scale industries and take up production at these relief centres of component parts or accessories of larger items of industrial output. Such production would only have to be done by the semi-permanent nucleus labour force at the centre.

Each centre would require technical, supervisory and instructional staff. During the time when there is not enough work at the centre, such staff will be used as service agents for helping the individual artisans and the industrial co-operative societies in the roundabout areas. In addition to this, supervision both at the district and state levels would be absolutely necessary. In consequence of the type of production by the type of people intended to be employed and in view of the fact that a large portion of the period of the working of these centres would be utilized in training the unskilled workers, it is not expected that the receipts will be more than 75 to 80 per cent. of the raw materials invested. Certain substantial amounts will, therefore have to be provided as marketing subsidy in order that the goods may be marketed.

The following industries are proposed to be taken up at these centres :—

1. Manufacture of bricks.
2. Manufacture of tiles.
3. Manufacture of lime.
4. Manufacture of mortar.
5. Spinning.
6. Rope making.
7. Coir industry.
8. Collecting of seeds of non-edible oil.
9. Collection of bones and bone meal industry.
10. Pottery (village pottery).
11. Cotton thread buttons.
12. Mat making industry including straw, grass and leaves.
13. Bamboo mats and baskets, etc.
14. Glass bead making.
15. Fibre industry.
16. Umbrella manufacture.
17. Footware industry.

18. Palm leave products.
19. Newar and tape making.
20. Shoe lace and eyelets making.
21. Hosiery.
22. Timber cutting and sawing.
23. Blacksmithy and tinsmithy.
24. Batara manufacture.
25. Handmade paper industry.
26. Packing industry (card board and timber box and paper bag making).
27. Agarbatti.
28. Making of component parts of large scale and small scale industries.

Wherever possible, the activities of these centres will be linked up with the activities of co-operative farming societies in order to employ a large number of members of such societies who will be unemployed for certain periods in a year. The Bombay Village Industries Board and other non-official agencies will also be requested to help in implementation of the scheme by taking up work in respect of those industries which they look after. The advice in the matter of service, investigation and supervision of the Regional Small Industries Service Institute and the marketing assistance of the Small Scale Industries Marketing Service Corporation to be established will be taken in ample measure so that the marketing difficulties could be reduced.

The estimates of expenditure in respect of the above scheme per centre are as follows :—

	Rs.
I. Non-recurring—	
(*a*) Plot and building	20,000
(*b*) Equipment and furniture	25,000
	45,000
II. Recurring—	
(*a*) Staff (including Manager, Instructors, Supervisors and Class IV Servants)	23,000
(*b*) Working capital (for raw-materials, wages, etc., as loan)	80,000
(*c*) Subsidies for meeting losses on account of wages, stipends, etc., Government of Bombay share Rs. 8,000 (Government of India's share Rs. 24,000)	32,000
(*d*) Miscellaneous contingencies such as railway freight, octroi, transport Hamali, etc.	2,000
	1,37,000

Therefore, for 5 years per centre Rs. 2,05,000 recurring and Rs. 45,000 non-recurring or total Rs. 2,50,000 will be required.

During the first year 3 centres will be taken up for organisation and they will start working in the second year. The programme for subsequent years will also be phased so that in the last year of the Second Plan period about 40 centres would be functioning in the State. The total expenditure during the 5 years will be Rs. 1,24,76,000 of which Rs. 20,70,000 will be non-recurring and Rs. 1,04,06,000 recurring.

The cost on account of supervisory and quality marking staff at the state level and the divisional and district level staff, inclusive of pay, allowances and contingent expenditure during the five-years is estimated at Rs. 5,24,000.

The assistance from the Government of India contemplated in respect of this scheme and the cost to State Government are as shown below :—

Government of India—	Rs.
Subsidy	47,79,500
Loan	36,80,000
Cost to Government of Bombay	45,40,500
	1,30,00,000

SCHEME No. 200.

Name of the Scheme.—**Organisation of post-training production centres in Backward Areas.**

Recurring	.. Rs. 2,45,968	Non-recurring	.. Rs. 18,156
Total	.. „ 2,64,124	Ultimate annual recurring	„ 55,230

Remarks.—The Industrial Co-operatives and Village Industries section of the Co-operative Department has already organised a number of schools for imparting training in various crafts to the artisans. In order to have more practical training-after completion of training course it is felt necessary to organise some post-training-*cum*--production centres so that the trainees after training will get practical experience in the craft and afterwards they can independently carry on the industry efficiently. It is, therefore, proposed to organise 3 post-training production centres during the course of five years for Backward Classes in the Bombay State. The industries selected are wool weaving, fibre work and tanning. Twelve students will be admitted in each class with the benefit of stipends of Rs. 20 per mensem each for the period of training, viz., 12 months. After the completion of the training course, the production in the respective craft will be undertaken and the trainees will be employed on piece work basis or on daily wages for a period of 9 months. After a period of one year and 9 months, a fresh batch of 12 students will be admitted for training at each centre. Admission to these centres will be restricted to only Backward Classes. However, non-Backward Classes will be admitted only if Backward Class candidates in requisite number are not forthcoming so that Backward Class artisans themselves would come forward. For every centre there will be a local Advisory Committee and the finished goods will be marketed locally as far as possible. The centre will be started at district headquarters or other places where communications, bazar and other facilities are available.

As the centres are mainly training institutions, the estimated receipts are **Rs. 1,11,500.**

Scheme No. 201.

Name of the Scheme.—**Starting Production Centres in chrome uppers and picking bands.**

Recurring	.. Rs.	3,61,290	Non-recurring	.. Rs.	1,45,408
Total	.. ,,	5,06,698	Ultimate annual recurring	,,	36,567

Remarks.—There are very few factories in Bombay State which manufacture chrome uppers required for the manufacture of shoes, etc. and also picking bands which are required in textile Mills. The Bombay State has to depend on imported leather chrome and picking bands. Every year large quantities of leather goods are purchased by the Central Purchasing Officer, Bombay, through co-operative leather workers societies but the societies have to depend on goods which are purchased out of Bombay State. It is estimated that the requirement of zug grain leather would be to the tune of 60,000 sq. ft. With a view to meeting this demand, it is proposed to establish a production centre. There is also a large number of textile Mills, which require substantial quantities of picking bands and the requirements of these mills will be met to some extent by the proposed production unit.

Estimate of Expenditure

Non-recurring—

		Rs.
1.	Spliting machine	25,000
2.	Shaving machine	8,000
3.	Buffing machine	1,500
4.	Glazing machine	1,500
5.	Drums (4)	12,000
6.	Staking machine	3,000
7.	Embossing machine	14,000
8.	Liming and tanning pits	5,000
9.	Wooden tube	2,000
10.	Stuffing drum or hot room	5,000
11.	Straining board	1,000
12.	Spraying equipment	6,000
13.	Furniture	2,000
14.	Electric Motors	4,500
15.	Pulley, shafts, etc.	1,000
16.	Installation charges	1,000
17.	Small laboratory for testing and chemical control ..	3,000
18.	Shed and building	40,000
	Total non-recurring ..	1,38,000

Recurring—

	Rs.	Rs.
(a) *Pay of staff*—		
1. Manager in the grade of Rs. 220—650 ..	2,640	
2. Technical Assistant in the grade of Rs. 150—10—200(2) ..	3,600	
3. Foreman in the grade of Rs. 80—4—120 (2).	1,920	
4. Assistant Foreman in the grade of Rs. 61—3—85 (2)	1,464	
5. Senior Clerk in the grade of Rs. 100—8—140	1,200	
6. Store Keeper in the grade of Rs. 46—130 ..	650	
7. Peons in the grade of Rs. 30—½—35 (2).	720	
8. Watchman in the grade of Rs. 30—½—35.	360	
		12,564
	12,564	
(b) *Allowances and Honoraria*—		
(i) Dearness allowance ..	6,420	
(ii) Travelling allowance (ordinary) ..	1,200	
(iii) House-rent allowance ..	924	
		8,544
	8,544	
(c) *Contingencies*—		
(i) Repairs and renewals ..	1,000	
(ii) Miscellaneous expenses such as electric charges, sweeping charges, postage, stationery books, etc.	2,550	
(iii) Transport ..	4,450	
(iv) Commission	4,690	
		12,690
	12,690	
Total for one year ..	..	33,798
Total for five years ..	..	1,68,990

Working capital (which will be used in rotation for five years)—

	Rs.
(1) Ram materials	1,10,000
(2) Labour	14,300
(3) Tanning materials and chemicals	68,000
	1,92,300
Total recurring ..	3,61,290

The Government of India are expected to give a loan of Rs. 1,92,300 for working capital for raw materials, wages, etc. initially. This amount has been shown as recurring as the system of Personal Ledger Account will not be operated. In the first year of the plan period, i. e, for 1956–1957, working capital has been provided for six months only.

SCHEME No. 202.

Name of the Scheme.—**Organisation of Retanning and Finishing Centre for Backward Areas.**

Recurring	.. Rs.	71,064	Non-recurring	.. Rs.	95,000
Total	.. ,,	1,66,064	Ultimate annual recurring	,,	14,532

Remarks.—The Industrial Co-operative and Village Industries Section of the Co-operative Department has already organised a retanning and finishing centre at Satara for manufacture of rolled leather and dyeing and finishing of skins. The bag-tanned leather manufactured by the village tanners are rolled and finished at a nominal rate. Because of the finishing processes, the leather fetches more value and gets a very good market. By organising such centres at various places the village-tanners would be benefited. The estimated receipts for the five years are Rs. 20,000. The centre is not a production centre but it is for the benefit of the village tanners who will get better remuneration.

SCHEME No. 203.

Name of the Scheme.—**Starting a production centre in Pit-tanned leather.**

Recurring	.. Rs.	2,19,238	Non-recurring	.. Rs.	76,000
Total	.. ,,	2,95,238	Ultimate annual recurring	,,	22,821

Remarks.—Pit-tanned leather which is superior to bag-tanned leather, is not prepared on large scale. The leather is required for the manufacture of Ammunition Boots, etc. Every year large orders of ankle boots are received through the Central Purchasing Officer, Bombay, and the societies have to purchase this leather from Kanpore and other places. It is, therefore, proposed to establish one unit to encourage tanners to follow pit-tanning.

Estimates of expenditure

Non-recurring—

		Rs.
1.	Rolling machine	18,000
2.	Drums	5,000
3.	Construction of liming and tanned pits	10,000
4.	Tubes	2,000
5.	Other tools and equipment	2,000
6.	Drying shed	5,000
7.	Electric motors	3,000
8.	Pulleys, shafts and installation charges, etc.	1,000
9.	Land, building, etc.	30,000
	Total, non-recurring ..	76,000

Recurring—

	Rs.	Rs.
(a) *Pay of staff*—		
1. Manager in the grade of Rs. 220—15—400	2,640	
2. Technical Assistants (2) in the grade of Rs. 100—8—140.	2,400	
3. Store-keeper-*cum*-clerk in the grade of Rs. 46—130.	660	
4. Peon in the grade of Rs. 30—1/2—35 ..	360	
	6,060	6,060
(b) *Allowances and Honoraria*—		
(*i*) Dearness allowance	2,760	
(*ii*) Travelling allowance (ordinary) ..	600	3,360
(c) *Contingencies*—		
(1) Repairs and renewals	500	
(2) Miscellaneous expenses such as Electric Charges, Sweeping charges, Postage, stationery books, etc. ..	2,550	
(3) Transport	4,500	
(4) Commission	3,710	
(5) Working capital	1,10,500	
(*i*) Raw Materials	72,000	
(*ii*) Labour	9,000	
(*iii*) Tanning and other materials ..	29,500	
		1,21,760
Total recurring ..		1,31,180

SCHEME No. 204.

Name of the Scheme.—**Manufacture of screw drivers, locks, umbrellas, cycle bells and other spare parts, etc.**

Recurring	.. Rs.	3,63,300	Non-recurring	.. Rs.	6,36,700
Total	.. ,,	10,00,000	Ultimate annual recurring.	,,	1,70,284

Remarks.—The Small Scale Industries Board under the Ministry of Commerce and Industry, Government of India has under consideration schemes for organisation of small hand tools on the basis of co-ordinated efforts between large central factories and small scale engineering workshops equipped with suitable machinery tools. Tools like screw drivers, spanners etc. would fall under this category. The manufacturing processes involved are not very complicated. Some of the processes require power operated automatic machinery. Such processes can be carried out in a central factory located in a District Head Quarters and the remaining operations may be carried out in small scale factories in villages nearby. In the initial stages some sort of training may have to be given to the personnel for a period of about six months. Wherever possible advantage will be taken of existing workshops and equipment to minimise the cost of organising central units.

Padlocks.—Padlocks are manufactured on a very large scale at Aligarh in India. The industry is established in Aligarh and round about villages for over a century and it is very easy to get skilled as well as trained labour for carrying out this industry In view of the scope for development of manufacture of padlocks and looking to the position of market in regard to the availablity of good quality locks, it is proposed to organise two centres for manufacture of padlocks during the Second Plan period.

The paucity of trained labour will have to be made good by making arrangements for training of the workers. It is suggested to train these workers at the Village Industries Experimental Workshop, Poona and start with the manufacture of galvanised iron and brass padlocks in different sizes, at these centres. After the workers are trained they will go to their places and start the industry in small groups. They will be supplied necessary raw material and semi-finished goods requiring finishing on heavy machinery from the central training centre. They will be assisted in procuring necessary hand tools etc. on reasonable terms. In the initial stages the locks will be manufactured against Government requirements and subsequently the locks can find a way to open market as these will be manufactured to standard specifications.

The annual consumption of umbrellas in India is estimated at ten lakh dozens. A substantial portion of this demand is met by industry in Bombay State. The cloth, rods, handles, ribs and other accessories are manufactured in small scale and medium scale factories most of which are located in Bombay City. The process of assembling of parts, stitching of cloth and packing are carried out by manufacturing operations in small scale seasonal factories. These processes are simple in operation and could be carried out without difficulty by villagers after a short training period. Hundreds of workers are employed for these operations during the season between December to June. It may be possible to divert the work to a number of village centres organised on a co-operative unit. As mentioned above, it may be necessary to make arrangements to train the artisans in order to initiate them into this industry. It may be necessary to procure co-operation of companies manufacturing accessories required for the assembly of umbrellas. It is proposed to organise one centre for manufacture of umbrellas during the Second Plan period. Similarly there is good scope for manufacturing screw drivers and other tools for which one centre is proposed to be organised during the Second Plan period. These centres will be organised at places where communication, bazar and other facilities are available. The centres would provide employment to 120 persons. The estimated receipts would be about Rs. 4,55,000.

The total cost on the scheme for five years would be Rs. 10,00,000 (recurring Rs. 3,63,300 and non-recurring Rs. 6,36,700).

SCHEME No. 205.

Name of the Scheme.—**Organisation of a polytechnic in Cottage Industries.**

Recurring	...	Rs. 3,69,000	Non-recurring	...	Rs.	1,06,000
Total	...	„ 4,75,000	Ultimate annual recurring.		„	76,000

Remarks.—For training of artisans in cottage industries in improved methods of production a number of training institutions have been started at different centres in the State. These schools are at present supervised for their day to day activities by the district staff who has in many cases no technical know-how about the cottage industries and work of these institutions, therefore, suffers a lot. In case these officers are given basic training covering the utility and advantages of improved tools and equipment, the different raw materials used in these industries, their availability, prices, etc. the different processes adopted in the manufacture of these products, their economies, etc. it would be possible for the district supervisory staff to do the supervision more efficiently. With this end in view it is proposed to organise a training institution in Poona where arrangement for short term training of six months of these officers could be made. The institutions will not only cater to these requirements but also be handy in organising refreshers courses for the Instructors of the technical training schools of the Department. Regular courses for training of a limited number of educated persons, preferably artisans, will also be arranged at this institution. These trained persons can create a source for the posts of Assistant Instructors or Instructors for the technical schools and remove the dearth of these personnel to some extent which is very badly felt at present. In the initial stages industries like handloom weaving, leather work, cane and bamboo, wool weaving, carpentry and smithy, hosiery, chemical and miscellaneous industry etc. would be taken up. It is proposed to train about 24 persons during a year out of which about 18 will be departmental staff while the remaining would be outsiders. The total cost on account of this during the Second Five Year Plan works out to Rs. 3,69,000 recurring, Rs. 1,06,000 non-recurring and Rs. 4,75,000 total. The expenditure on the scheme is expected to be shared between the Central and State Governments as shown below—

Share of State Government—

Recurring Rs. 3,37,884 *plus* Non-recurring Rs. 37,750

Total Rs. 3,75,634

Share of Government of India—Revenue Grant Rs. 99,366

Grand Total Rs. 4,75,000

SCHEME No. 206.

Name of the Scheme.—**Research in Cottage Industries.**

Recurring	..	Rs. 5,90,030	Non-recurring	..	Rs.	1,57,500
Total	..	„ 7,47,580	Ultimate annual recurring		„	1,23,020

Remarks.—In order to promote research in methods of production in cottage industries two schemes regarding Village Industries Experimental Workshop and the Village Industries Research Laboratory have been taken up. It is proposed to expand the activities of these institutions during the Second Plan period. It is also proposed to continue the activities carried out at the following three research centres :—

(1) Small Research Laboratory-*cum*-Sample Production Centre, Poona.
(2) Dyeing and Printing Experimental Laboratory, Poona and
(3) Government Silk Farm, Hindalge, District Belgaum. The nature of expansion and continuance contemplated under each of the above schemes is given below :—

(1) *Expansion of the Village Industrial Experimental Workshop, Poona.*

In order to meet promptly the requirements of cottage industries for improved tools and equipment it is necessary to purchase additional machinery for the workshop, so that more tools and equipment could be manufactured and also to reorganise the stores section for storing the additional goods and equipment manufactured at the workshop.

(2) *Expansion of the Village Industries Research Laboratory, Poona.*

The activities of Government and of the Village Industries Board have been continually expanding. Consequently the work at the Laboratory has to be considerably intensified. It is, therefore, necessary to expand the Laboratory so that the results of the research could be made available to villages for being put to actual use.

(3) *Expansion of Research Laboratory*-cum-*Sample Production Centre, Poona,* 5.

In order to improve and evolve new designs of handlooms and reproduce some of the attractive patterns of handloom fabrics which commanded a good market, it is necessary to continue the activities of the Research Laboratory-*cum*-Sample Production Centre.

(4) *Expansion of Dyeing and Printing Experimental Laboratory, Poona.*

To cope with the increasing demand in the handloom industry for attractive colour, combinations and designs and to test the quality of dyes used for yarn required by the handloom weavers it is necessary to equip this laboratory with additional machinery and staff during the period of the Second Five-Year Plan.

(5) *Expansion of Government Silk Farm, Hindalge, Belgaum.*

The experimental work done at the silk farm in the rearing with different varieties of silk worms, mulberry cultivation, microscopic examinations of moths, reeling of cocoons etc. has been found to be of use to agriculturists. In order to intensify this work and to supply to the agriculturists larger quantities of disease free laying-cuttings and seedlings of mulbury, it is necessary to expand the activities conducted at this farm.

The total cost on account of the above proposals will be Rs. 7,47,580 of which Rs. 5,90,080 would be recurring and Rs. 1,57,500 non-recurring. The recurring cost includes expenditure on the appointment of administrative and supervisory staff at the Village Industries Experimental Workshop, Poona, to superivse the work of all the Research Institutions established in the premises of the Village Industries Experimental Workshop, Poona.

SCHEME No. 207.

Name of the Scheme.—**Scheme for Achievement Audit for purpose of Evaluation of Work done for Development of Small Industries.**

Recurring	... Rs.	1,98,000	Non-recurring	... Rs.	2,000
Total	... ”	2,00,000	Ultimate annual recurring	,,	41,780

Remarks.—The State Co-operative Council has recommended that an Achievement Audit for the purpose of evaluation of the work done from time to time is necessary and this should form a part and parcel of the Second Five-Year Plan. At present there is no staff to attend to the evaluation work on a scientific basis. A provision to the extent of Rs. 2,00,000 for the period of five years has, therefore, been included for the appointment of the necessary staff under the scheme for Achievement Audit of the activities for the promotion of Small Industries including the Industrial Co-operative Societies in the Bombay State.

SCHEME No. 208.

Name of the Scheme.—**Collection of Industrial Statistics for certain Cottage Industries.**

Recurring	... Rs.	2,26,000	Non-recurring	... Rs.	8,000
Total	... ,,	2,34,000	Ultimate annual recurring	,,	60,320

Remarks.—As a first step in the direction of a revival and rehabilitation as well as for the proper development of small industries it is necessary to obtain full and reliable data in regard to each and every cottage industry. The Government of India have constituted separate boards for the development of each cottage industry and these boards require the preliminary data for the purpose of planning and co-ordination of schemes for development. The role of cottage industries in providing rural employment is also very great. It is, therefore, proposed to strengthen the office of the Joint Registrar for Industrial Co-operatives and Village Industries with a view to collecting statistics relating to employment, production, etc. in units not covered by the Factories Act. Statistics relating to industries covered by the Factories are already being collected by the Director of Industries under the Industrial Statistics Act. Since the Industrial Statistics Act does not apply to cottage industries it will be necessary to conduct *ad hoc* surveys of important problems pertaining to collection of routine statistics of cottage industries and keep such statistics up to date in order that they may be useful for formulation of schemes as also for further research.

The following additional staff will be appointed for the purpose of collection of data and field surveys.—

Post.		No. of Posts		Pay scales. Rs.
Research Assistants	...	2	...	150—10—300
Investigators	...	10	...	100—8—140
Computors	...	4	...	100—8—140
Attendants	...	2	...	45 (fixed).

The Scheme will be implemented from the second year of the Plan period. A total provision of Rs. 2,34,000 has, therefore, beer made for four years in the Plan. A scheme for collection of statistics from as many of the remaining 34 industries and industries not using power, etc. has been separately included in the Second Five-Year Plan. The picture would still be incomplete as no statistics of establishments coming under the category of "cottage industries" would be collected under the proposed scheme. It is, therefore, necessary to fill this lacuna so as to have complete picture of the State in respect of large, medium and small scale and cottage industries. A scheme to collect statistics from cottage industries, is therefore included in the Second Five-Year Plan.

In the matter of collection of such statistics the following points require special consideration :—

(*i*) The cottage industries statistics will have to be collected on voluntary basis as there is no statute like the Industrial Statistics Act of 1942 to authorise collection on statutory basis.

(*ii*) As the cottage industries workers are mostly illiterate the statistics will have to be collected by personal visits. Mere postal surveys will not serve any purpose whatsoever. Special investigators will, therefore, have to be trained up for this sort of work.

(*iii*) The position of cottage industries changes from year to year and from season to season. It will be necessary, therefore, to plan and carry out these investigations periodically both district-wise as well as industry-wise, according to the prevailing conditions.

(*iv*) It is also felt that the investigations should not merely be confined to the collection of the statistics of production but should also include the proper economic survey of the Industries and a proper interpretation of statistics collected.

(*v*) As the cottage industries are located mostly in villages and small towns it may not be practicable to adopt intensive surveys (i.e. by census methods) for collection of cottage industries statistics in any reasonably short time, even if the expenses could be met or a sufficient number of investigators found. It is, therefore, necessary to proceed by sampling. In initial stages of the work, pilot surveys in two or three districts will be carried out for ascertaining the size of the sample required.

In the Report of the Bombay Economical and Industrial Survey Committee, lists of 33 whole-time cottage industries and 23 part-time cottage industries are given. It is proposed that in the first place a beginning may be made on collecting statistics of some 10 important cottage industries and then the scope may be widened gradually to cover up all cottage industries of this State.

The following additional staff will be necessary :—

	Post		No.	Scale
				Rs.
1.	Industrial Statistician	...	1	350—30—650—E.B.—45—785.
2.	Research Assistant	...	1	220—15—400.
3.	Head of Branch	...	1	170—10—250.
4.	Noting Assistant	...	1	150—10—280.
5.	Clerks	...	4	75—5—140—6—200.
6.	Typists	...	2	75—5—140—6—200.
7.	Peons	...	2	35—1/2—40.

Post	No.	Scale
Field Staff.		Rs.
1. Senior Industries Inspector (one for each region).	2	160—10—250—10—300—15—375 (Mofussil).
2. Junior Industries Inspector (Two for each region).	5	150—7—185—8—225 (Mofussil).

The total cost involved during the period of Second Five-Year Plar for the scheme is Rs. 2,34,000.

SCHEME No. 209.

Name of the Scheme.—**Village Industries Schemes proposed by the Bombay State Village Industries Board.**

Recurring	.. Rs.	20,00,000	Non-recurring	.. Rs.	*Nil.*
Total	.. „	20,00,000	Ultimate annual recurring..	„	4,00,000

Remarks.—The Government of Bombay had constituted a Committee consisting of non-officials with considerable experience in Village Industries work for looking after the development of Village Industries. This Committee has now been constituted into a statutory Board. An amount of about Rs. 8 lakhs is made available every year to this Board as grant for carrying on activities relating to Village Industries. The Board generally looks after industries relating to food and clothing. The Co-ordination Committee which consists of officials and representatives of the State Industrial Co-operative Association as well as the Bombay Village Industries Board has decided that the Bombay Village Industries Board should be responsible for the development of the following Village Industires :—

1. Khadi.
2. Palm Gur.
3. Bee-keeping.
4. Hand-made paper.
5. Salt.
6. Ghani oil.
7. Crayars and Craypass.
8. Sealing Wax.
9. Ghee.
10. Bone meal.
11. Chalk.
12. Plaster of Paris.
13. Slate Pencils.
14. Mat weaving.
15. Hand-pounding of rice.
16. Match industry.

The Board has also been authorised to obtain funds for the development of these industries directly from the All-India Khadi and Village Industries Board. In addition to the existing grant of about Rs. 8 lakhs the Government of Bombay proposes to make available a sum of Rs. 4 lakhs every year during the Second Five-Year Plan period to the Board for the development of Village Industries. These include schemes for hand spinning and hand weaving, introduction of improved hand chakkis and bullock chakkis, development of bee-keeping and neera and palm gur industry, meat making and paper making and for extraction of non-edible oil for manufacture of soap, etc.

SCHEME NO. 210.

Name of the Scheme.—**Development of handloom industry.**

Recurring	... Rs.	1,00,00,000	Non-recurring	... Rs.	*Nil.*
Total	... „	1,00,00,000	Ultimate annual recurring	„	*Nil.*

Remarks.—Financial assistance is being given by the Government of India for the development of the handloom industry. The share of the Bombay State from the cess fund for the year 1954–55 was 38·97 lakhs and similar amount is expected to have been given during the year 1955–56. During the Plan period it is expected that the share of the Bombay State would be substantially increased. However, an *ad hoc* provision of Rs. 1,00,00,000 has been made during the Plan period under the scheme.

The scheme contemplates financial assistance for various purposes to the weavers' co-operative societies for the development of the handloom industry, e. g., for supply of improved tools and appliances so as to increase the production of handloom cloth whereby it would be possible to reduce the cost of manufacture, grants for opening sales depots, plying mobile vans for sale of handloom cloth, dye houses, model production centres, research laboratories, establishing of bleaching, finishing and calendering plants, etc. Provision has also been made for giving loans to weavers' societies for working capital and share capital. In order to enable the handloom cloth to face the competition from mill made cloth provision has also been made for giving rebate of annas 2 per rupee on sale of handloom cloth.

Supply of different types of improved tools and implements such as automatic take up motion attachments, steel reeds, varnished healds, dobbiles, double boxes, wider slays, warping machines, is required to be made according to the needs of artisans. Similarly opening of sales depots, dye houses, establishing bleaching, finishing plant will have to be made according to the requirements of the weavers' societies. Most of the schemes mentioned above are already under implementation and as soon as need for supply of particular tools and implements ceases to exist the schemes for supply of those particular tools and equipments will have to be stopped and instead some other tools and implements will have to be given. It is also likely that according to the recommendation of the Textile Enquiry Committee, some of the existing handlooms may have to be converted into semi-automatic looms and even powerlooms. In view of this no detailed plan has been chalked out of this scheme.

SCHEME NO. 211.

Name of the Scheme.—**Development of coir industry.**

Recurring	... Rs.	2,75,148	Non-recurring	... Rs.	2,20,880
Total	... „	4,96,028	Ultimate annual recurring	”	63,490

Remarks.—The State of Bombay accounts for an area of 30,000 acres (approximately) under coconut cultivation, the important coconut growing districts being North Kanara, Kolaba and Ratnagiri.

Taking an average yield of 79 trees per acre and 36 nuts per tree, the total plantation in the Bombay State would yield more than 8 crores and 20 lakhs of nuts per annum. Ordinarily 10,000 coconut husks would produce one ton of coir. Thus 8,200 tons of coir can be extracted from these husks every year from which 1,00,000 rolls of matting or 90,000 dozens of brush door mats of common size can be manufactured, providing employment to about 11,000 persons throughout the year.

As there is considerable scope for marketing coir goods it is necessary to encourage this industry, for which the following schemes are proposed to be undertaken during the Second Five-Year Plan period.

(1) Organisation of one Peripatetic Coir Work School.
(2) Development of Coir Industry through Coir Co-operative Societies.
(3) Purchase of samples of coir goods.
(4) Rebate on sale of coir goods.
(5) Scheme for management and organisational expenses.

Scheme No. (1).—It is proposed to organise one peripatetic coir work school for imparting training to artisans in improved methods of production and adoption of improved implements in the coir industry. About 12 students will be admitted in the school and will be paid stipends at the rate of Rs. 25 in urban areas or Rs. 20 in rural area. The cost on account of one school would be Rs. 8,530 per annum recurring plus Rs. 5,000 non-recurring. The total cost of the school will be Rs. 48,730 for five years.

Scheme No. (2).—There are at present only 4 co-operative societies in the coir industry, three in Honavar taluka, district North Kanara and one at Vengurla, district Ratnagiri. It is proposed to organise 20 co-operative societies for coir work during the Second Five-Year Plan period and assist them for purchase of tools, equipments, construction of sheds and in providing working capital. Out of these 20 societies two will manufacture high grade mats and mattings and ropes on a factory scale while the remaining 18 societies will be doing primary work such as retting extraction and spinning. The two societies which have to take up production of high grade articles will be organised one in the second year and the other in the fourth year.

Scheme No. (3).—In order to build up the trade in coir goods it is proposed to provide a grant of Rs. 30,000 over five years for purchase of samples of coir goods and for distributing them in the State.

Scheme No. (4).—The present production is estimated to be about 160 tons of coir manufactured in the State giving part time and full time employment to about 3,000 persons. The total cost of the coir produced in the State will be Rs. 1,00,000 at present. In order to encourage production and sale of coir goods it is proposed to give a subsidy of two annas per rupee as rebate towards the goods produced and sold through co-operative societies.

Scheme No. (5).—For the management and organisation of about 4 schemes it will be necessary to provide for expenditure at 5 per cent. of the cost of the schemes which comes to Rs. 23,620.

Share of Central Government			Share of Bombay Government			
Loan	Subsidy	Total	Recurring	Non-recurring	Loan	Total
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1,45,688	65,722	2,11,410	2,13,176	22,880	48,562	2,84,618

SCHEME No. 212.

Name of the Scheme—**Development of pottery industry.**

Recurring	... Rs.	1,25,000	Non-recurring	... Rs.	1,52,000
Total	... "	2,77,000	Ultimate annual recurring	"	25,000

Remarks.—Pottery as a cottage industry has existed in the Bombay State for centuries. However, the growing demand for glazedware pottery cannot be neglected. The glazedware pottery industry is a new industry in this State and already the necessary training is being imparted through regular schemes. The survey of raw materials for the industry had been made and is being made in details in years to come. It is an industry which can successfully be run on small scale basis on co-operative lines. For this purpose, however, it is necessary to decentralise the processes as far as possible. A Central State Pottery Service Station is necessary to be established which forms the neucleus of the whole scheme. It manufactures and supplies processed raw materials glazes, colours etc. to both individual artisans and co-operative societies which be organised on a loan cum-subsidy basis in two or three places in the State. A production centre is also attached to the service station which puts the researches carried out in the Central Station to practical test. It is necessary to study the requirements of such service station in foreign countries and hence it is provided to depute one of the members of the staff for such training to foreign countries.

Details of expenditure

	Rs.
A. *Recurring* :—	
(*i*) Pay of establishment ..	1,25,000
(*ii*) Allowances and Honoraria ..	
(*iii*) Contingencies ..	
(*iv*) Stipends ..	
B. *Non-recurring* :—	
(*i*) Working capital and raw material ..	1,52,000
(*ii*) Machinery and equipment ...	
(*iii*) Additions and alterations to existing Government buildings	
(*iv*) Training abroad	
Grand Total ..	**2,77,000**

SCHEME No. 213.

Name of the Scheme.—**Development of Sericulture Industry.**

Recurring	**.. Rs.**	**3,48,903**	**Non-recurring**	**.. Rs.**	**46,400**
Total	**.. „**	**3,95,303**	**Ultimate annual recurring**		**85,211**

***Remarks.*—It is proposed to expand the activities of the Government Silk Farm, Hindalge and to provide for additional measures for development of Sericulture in**

the State during the Second Five-Year Plan. The following schemes will be undertaken for this purpose :—

Serial No.	Name of the Scheme	Total expenditure for five years		
		Recurring	Non-recurring	Total
		Rs.	Rs.	Rs.
(1)	Scheme for establishment of Nursery Station at Government Silk Farm, Hindalge, District Belgaum.	60,555	38,900	99,455
(2)	Scheme for purchase of cocoons from agriculturist.	1,22,080	2,000	1,24,800
(3)	Scheme for rearing of Chawki worms ...	69,180	4,500	73,680
(4)	Scheme for supply of Chandrikas to the Agriturist free of cost ...	14,300	Nil	14,300
(5)	Scheme for management and for propaganda for the development of sericulture industry ...	82,788	1,000	83,788

Scheme No. (1).—This scheme contemplates establishment of a Nursery Station at the Government Silk Farm, Hindalge for carrying cut studies in moriculture, life cycles of different varieties of silk worms of foreign breed and hybirds, qualities and yield of cocoons of different breeds etc. It is also proposed to import Japanese mulberry and silk worms through the Central Silk Board for the Nursery Station. The expenditure on account of pay and allowances of staff etc., will be Rs. 60,555 for five years. The non-recurring expenditure on account of equipment etc., for the Station will be Rs. 38,900.

Scheme No. (2).—The agriculturists have at present to take the cocoons to the Silk Farms to get them reeled which takes a pretty long time. They thus waste their energy and time. It is, therefore, necessary to introduce a scheme for outright purchase of cocoons as and when tendered by the agriculturists and pay them the cash on the spot as recommended in the Survey Report by the Assistant Secretary, Central Silk Board. This involves some loss which may have to be borne by Government initially. This loss is likely to be reduced when the quality of cocoons produced by the agriculturists improves. The annual cost involved in the scheme is given below :—

(a) *Pay of staff*—		Rs.
Four reelers on Rs. 50 p.m. each in the grade of Rs. 50—2—60.		2,400
(b) *Allowances and Honoraria*—	Rs.	
Dearness Allowance	1,680	1,880
Travelling Allowance	200	
(c) *Contingencies*—		
1. Fuel charge etc.	500	..
2. Miscellaneous expenditure ..	300	..
3. Purchase of cocoons	10,000	..
Total recurring	..	15,080
Non-recurring (furniture and equipment)	..	2,000
(Estimated receipt Rs. 9,000).		

Scheme No. (3).—The early part of silk-worm rearing up to 2nd and 3rd moult which is denoted by the term "chowki rearing" requires very careful attention. It is, therefore, proposed to start two choki-worm rearing centres one in Belgaum and the other in Dharwar District. During the subsequent years of the Second Plan, it is proposed to start three more centres by stages. The work will be taken up at the Sericulture Farm, under the general supervision of the Demonstrator of the Farm. It will be necessary to supply chowki worms free of charge to the agriculturists to encourage them to take to the sericulture industry until they are convinced of the benefits of the industry.

In addition it is proposed to give a grant-in-aid at Rs. 930 per annum to the Belgaum and Shahapur Taluka Co-operative Sericulture Development Society Limited at Belgaum, for conducting a Chowki rearing Centre. The total cost on account of running one such centre comes to Rs. 3,270 Recurring plus Rs. 900 Non-recurring. The total cost on account of 5 centres and grant to one centre of the Co-operative Society will be Rs. 69,180 Recurring plus Rs. 4,500 Non-recurring.

Scheme No. (4).—It is proposed to sanction during the second plan period grants for supply of Chandrikes free of cost to about 50 families of agriculturists on the condition that they will be utilised for carrying on the Sericulture industry till they are worn out or they should be returned to Government in good condition, if the agriculturists discontinue to pursue the industry. Chandrikes may also be supplied to Sericultural Farms. The distribution work and the proper utilisation of the equipment will be attended to by the existing propaganda staff and no extra staff will be necessary. A provision of Rs. 14,300 has been made on account of the grants.

Scheme No. (5).—It is proposed to appoint the following additional staff during the Second Plan period for the purpose of carrying on propaganda and intensification of the activities undertaken for development of the sericulture industry.

One Superintendent of Sericulture (Class I State Service) in the grade of Rs. 410—30—650—E.B.—45—1,100.

Two Senior Clerks (for statistics) in the grade of Rs. 100—8—140—10—150.

Two operatives in the grade of Rs. 50—2—60.

One peon in the grade of Rs. 30—½—35.

The expenditure on account of pay and allowances for the additional staff and contingencies will be Rs. 82,788 for five years. In addition a non-recurring expenditure of Rs. 1,000 will be incurred on furniture.

SCHEME NO. 214.

Name of the Scheme.—**Development of Tanning and Leather Working Industries.**

Recurring	... Rs.	4,43,217	Non-recurring	... Rs.	15,79,500
Total	... ,,	20,22,717	Ultimate annual recurring	,,	97,815

Remarks.—The Cottage Tanning and Leather Working Industries are in the hands of Backward Classes. They require larger amounts of capital than several other cottage industries. But the artisans have not enough financial resources nor generally the credit necessary for raising the capital. Not only does this result in exploitation of artisans, but also the Industries themselves, particularly the tanning industry, suffer a great deal due to lack of capital. In order, therefore, to afford relief to the artisans and to encourage the Industry through Co-operative Societies, it is proposed to assist the Tanners' and Leather Workers' Co-operative Societies by providing adequate working capital, tools and equipment, sheds and lime pits etc., under this scheme. The total cost of the scheme as also the shares of the Central and State Governments are indicated below—

Total Cost :—

Revenue		Capital	Loan	Total
Recurring	Non-recurring			
Rs.	Rs.		Rs.	Rs.
4,43,217	52,375	*Nil*	15,27,125	20,22,717

Central Assistance :—

Revenue grant	Capital grant	Loan	Total
Rs.	Rs.	Rs.	Rs.
1,26,007	*Nil*	11,84,625 or 11,85,000 in round.	13,10,632 or 13,11,000 in round.

Cost to State Government :—

Revenue		Capital	Loan	Total
Recurring	Non-recurring			
Rs.	Rs.		Rs.	Rs.
3,17,210	52,375	*Nil*	3,42,500	7,12,085

The details of expenditure involved in the schemes for a period of five years are given below :—

Serial No.	Name of the scheme	Total	
		Recurring	Non-recurring
		Rs.	Rs.
1	Construction of Tanning and lining pits	......	90,000
2	Purchase of tools and equipment	......	60,000
3	Construction of sheds and tanneries	......	1,32,000
4	Marketing	89,760	1,35,000
5	Working capital for Tanners' Co-operative Societies ...	......	6,00,000
6	Assistance for purchase of tools and equipment for leather Workers' Co-operative Societies	......	59,500
7	Working capital for leather workers' societies for purchase of raw materials	......	3,15,000
8	Organisation and Supervisory Staff	3,13,797	......
9	Management, organisation expenses at 2 per cent. of the total expenditure of Rs. 19,83,057 as shown above ...	39,660	......
	Total ...	4,43,217	15,79,500

GRAND TOTAL ...Rs. 20,22,717

Scheme No. 215.

Name of the Scheme.—**Development of woollen Industry.**

Recurring	... Rs.	5,87,000	Non-recurring	... Rs.	2,63,000
Total	... ,,	8,50,000	Ultimate annual recurring	,,	1,50,000

Remarks.—The sheep breeding centres in the Bombay State are being expanded, and it is expected to get more and more improved wool in future. It is, therefore essential in the interest of the cottage wool industry that the manufacturing processes followed in the cottages should keep pace with the progress of sheep breeding and production of better type of wools. Accordingly the following schemes have been proposed during the Second Plan period in order to equip the industry with adequate machinery and to encourage production through direct financial assistance.

(1) Schemes for installation of testing machines and apparatus and a finishing plant at the wool utilisation Research Centre, Poona,

(2) Scheme for establishing of mixing and carding units,

(3) Scheme for giving rebate on sale of handloom woollen goods,

(4) Scheme for prpurchase of samples of handloom woollen goods.

Scheme No. (1) *above.*—The wool utilisation centre attached to the Central Sheep Breeding Farm, Poona, needs to be equipped with adequate machinery for carrying out routine tests of wool yarn and cloth and an uptodate small scale finishing plant so that the products of the village industry, particularly Kamblis, could be processed and made more attractive. The total cost of the testing machines and installation of a finishing plant will be Rs. 70,499 (non-recurring) as shown below:—

I. *Testing Machinery*:—

	£.	s.
(1) Warp reel No. 4	40	9
(2) Single thread tester No. 22	156	0
(3) Fabric strength tester (type 1a to 200 lbs.)	187	9
(4) Twist tester No. 7	40	17
i.e., Rs.	5,499	

II. *Installation of finishing plant*:—

	Rs.
(1) Milling and raising machine (from the United Kingdom ...	41,393
(2) Import duty at 25 per cent.	10,348
(3) Motors etc.	1,800
(4) Construction of sheds to house the machinery ...	6,500
(5) Installation charges belts accessories etc.	4,959
	65,000

The finishing plant will be operated by the technical staff of the Centre. No extra staff is necessary.

Scheme No. (2) *above.*—Since the quality and fibre content of wool varies from region to region and from flock to flock, it is essential to offer the village spinners with wool which is thoroughly mixed to a uniform grade so that goods of uniform colour and qualities are produced . It is accordingly proposed to provide three spinning centres with a mixing and carding unit, a trained operator will be necesary to handle the unit. It is proposed to operate the units departmentally in the initial stages and to hand them over to a co-operative society later. Of the 3 units one unit will be organised in the first year of the Plan and two units will be added in the second year.

The cost on account of such centre will be Rs. 86,380 per unit per annum as shown below :—

Recurring :—

(*a*) ***Pay of staff***—	Rs.
One Technical Assistant on Rs. 150 per mensem in the grade of Rs. 150—10—200	1,800
One Mechanical Assistant on Rs. 55 per mensem in the grade of Rs. 55—3—85—4—125—5—140	660
	2,460
(*b*) ***Allowances and Honoraria***—	Rs.
Dearness Allowance Rs. 1,140 Travelling Allowance Rs. 500	1,640
(*c*) ***Contingencies***—	
(*i*) Raw Materials	15,000
(*ii*) Rent at Rs. 50 per month	600
(*iii*) Sundry expenses at Rs. 50 p.m.	600
(*iv*) Manual Labourers (Two) at Rs. 1-8-0 per day ...	1,080
	17,280
Total—Recurring ...	21,380

Non-recurring :—

Teaser and lap carding Mixing Willow—1½ H.P. Carding Machine—2 H.P. Spinning Card—3 H. P. Tape Divider—1 H.P. One Ring Spinning Frame One Ring Twisting Frame	 65,000
Total —Non-recurring	... 65,000

Grand total for one unit—

For the first year	... 86,380

The total expenditure on account of 3 units will be Rs. 5,45,184, over five years.

Scheme No. (3).—In order to raise the sales of woollen goods which being coarse cannot compete with fine mill cloth it is proposed to give rebate at a flat rate of one and a half annas per rupee on purchase of handloom woollen cloth on the lines of the rebate given on handloom cotton cloth. On the basis of production of handloom woollen cloth about Rs. 89,000 will be required for granting rebate to consumer of the handloom woollen goods during the first year.

Scheme No. (4).—In order to help the weavers' co-operative societies to build up a trade in handloom woollen industry, it is proposed to purchase samples of the various varieties of handloom woollen cloth and distribute them. A total provision of Rs. 5,000 has been made in the Plan for this purpose.

For the management and organisation of the above schemes it will be necessary to provide for expenditure at 2 per cent. of the cost of the schemes which comes to Rs. 16,812 for five years.

SCHEME No. 216.

Name of the Scheme.—**Introduction of Rural Industrialisation Scheme.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,00,000
Total ... ,, 1,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—It is proposed to implement during the Second Plan period the scheme for Rural Industrialisation known as "Visvesvarayya Scheme" which is based on self-help. The object of this scheme is to increase gainful employment spread habits of discipline, self-help and collective efforts among rural population and to make each village group to be selected for the purpose of self administering and self-improving community. A similar scheme is already being implemented by the Mysore Government. Under this scheme, groups of about 15 villages having a population of about 20,000 would be formed for being administered by local committees consisting of social workers. The main function of the local committee would be to arouse local enthusiasm and harness all the available resources in aid of rural uplift by collecting popular contribution from the villagers. It is expected that about Rs. 30,000 may be collected by way of popular contribution in five years. The organising agency would be the All India Manufacturers' Organisation which will work in close co-operation with the local committees. Government would provide a grant of Rs. 1,00,000 to the organising agency during the Second Plan period.

SCHEME NO. 217.

Name of the Scheme.—**Scheme for affording marketing facilities to cottage industries products.**

Recurring ... Rs. 2,75,000 Non-recurring ... Rs. 25,000

Total ... ,, 3,00,000 Ultimate annual recurring ,, 55,000

Remarks.—Under the Government of India Scheme sanctioned from the Cess Fund, sales depots at suitable centres are being organised throughout the State for selling handloom cloth. It is, however, necessary to have special staff for propaganda of handloom cloth and other cottage industries products. It is, therefore, proposed to appoint 4 propagandists (3 of whom would be in charge of the three mobile vans which have been sanctioned by the Government of India for sale of handloom cloth) and 2 marketing officers. It is also proposed to have a mobile exhibition unit. For this purpose it is proposed to have a mobile van with a suitable body to serve as a mobile exhibition for display and sale of various cottage industries products of this State. The mobile unit will be in charge of one of the propagandists. In addition there would be one salesman for effecting sales through the mobile van. The entire publicity organisation will be placed in charge of the Liaison Officer who would be assisted by a senior clerk and one steno-typist. A recurring amount of about Rs. 2,500 per year will have to be spent for purchase of publicity material for the exhibition unit as well as, for the other mobile vans. The entire expenditure of the scheme would be as under :—

Recurring :—	Rs.
(1) Pay of Staff	33,412
(2) Travelling Allowances and Daily Allowances ...	6,000
(3) Purchase of Publicity material, Gramophone records, etc. ...	2,500
(4) House rent and other contingencies	3,000
(5) Running cost of mobile vans—	
(i) Petrol, oil, etc. at Rs. 300 per mensem	3,600
(ii) Servicing repairs, replacements, etc. at the rate of Rs. 300 per mensem	3,600
Total—Recurring ...	52,112
Non-recurring :—	
(1) Purchase of mobile van with special type of body, public address equipment	24,000
(2) Furniture for staff, etc.	1,000
Total—Non-recurring ...	25,000
Grand Total ...	77,112

As the scheme contemplates affording marketing facilities for all cottage industries products, it cannot be included in the schemes, to be financed from the Cess Fund.

SCHEME No. 218.

Name of the Scheme.—**Grant of loans to Small-scale and Cottage Industries.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 3 crores.
Total ... ,, 3 crores. Ultimate annual recurring ,, *Nil.*

Remarks.—In addition to the loan facilities provided by the Industrial Finance Corporation of India and the State Finance Corporation it is proposed under this scheme to provide an amount of Rs. 2·70 crores for giving loans to small-scale and cottage industries under the State-Aid Industries Rules. The Government of India have agreed to assist the State Government in giving these loans. It is estimated that on the existing basis agreed to by the Government of India an amount of Rs. 1·80 crores will be made available by that Government.

SCHEME No. 219.

Name of the Scheme.—**Organisation of Co-operative Sugar Factories.**

Recurring cost ... Rs. 2,07,000 Non-recurring ... Rs. 50,00,000
Total cost ... ,, 52,07,000 Ultimate annual recurring cost. ,, 41,400

Remarks.—There are 24 sugar factories including 14 co-operative sugar factories which have been recently organized in this State. The organization of such factories on a co-operative basis is a recent development and represents a pioneer effort by the sugarcane cultivators in the field of processing of agricultural produce. The main advantages of organising sugar factories on a co-operative basis are obvious. It helps to convert the sugarcane grown by the cultivators into sugar and other bye-products and enables the cultivators to secure better price for their cane in addition to sharing in profits made by the factories. Several parts of the Bombay State, especially the Deccan Canal areas, offer opportunities for the development of sugar industries, as not only are there large areas under sugarcane, but the production of sugarcane per acre and the percentage of recovery of sugarcane per acre are also much higher than in most other parts of India. It is, therefore, proposed to establish during the Second Five-Year Plan, five more sugar factories on co-operative basis in different parts of the State. Each of these sugar factories is proposed to be assisted by Government to the extent of Rs. 10 lakhs by way of contribution towards share capital and about Rs. 20 to 30 lakhs are expected to be collected by each co-operative sugar factory as its own share capital. A loan of Rs. 40 to 50 lakhs may have to be obtained by each factory from the Industrial Finance Corporation.

The scheme is expected to cost Rs. 52·07 lakhs to be allocated as under :—

	Total cost	Government of India's share	State Government's share
	Rs.	Rs.	Rs.
1. Loans ...	......	......	......
2. Contribution towards share capital.	50,00,000	25,00,000	25,00,000
3. Subsidies ...	......	......	......
4. Staff ...	2,07,000	......	2,07,000
Total ...	52,07,000	25,00,000	27,07,000

INDUSTRY AND MINING

(ORGANISATION OF INDUSTRIAL CO-OPERATIVE SOCIETIES)

SCHEME No. 220.

Name of Scheme.—**Organisation of the District Industrial Co-operative Associations.**

Recurring	...	**Rs. 2,24,300**	**Non-recurring ...**	**Rs. Nil**
Total	...	**,, 2,24,300**	**Ultimate annual recurring.**	**,, 44,856**

Remarks.—**With a view to developing cottage and village industries on a co-operative basis and to assist and guide primary industrial co-operatives in respect of development of any special schemes, purchase of raw materials at reasonable rates and to supply it to affiliated societies and to make arrangements for marketing the products of the primary industrial co-operative societies, a scheme for establishment of District Industrial Co-operative Associations has been undertaken. Under this scheme, 18 District Associations have so far been organised. It is proposed that under the Second Five-Year Plan such Associations may be organised in the 10 remaining districts of this State where such Associations have not been organised so far. These Associations will be granted assistance as under :—**

(*a*) A non-recurring grant of Rs. 3,035, and

(*b*) An annual recurring grant of Rs. 5,000 for first five years for meeting the cost of the Manager, Salesman, Accountant and Clerk and the peon, and rent and other contingency expenditure.

On the basis of the above rates the expenditure on account of grants to the ten District Associations will be as under :—

			Amount of grants Rs.
Non-recurring grant	...	...	24,280
Recurring grant	...	...	2,00,000
	Total	...	2,24,280 (i.e. Rs. 2,24,300 in round)

SCHEME No. 221.

Name of the Scheme.—**Organisation and grant of financial assistance to Forest Labourers' Co-operative Societies.**

Recurring	**Rs.**	**4,68,000**	**Non-recurring**	**... Rs.**	***Nil.***
Total	**... ,,**	**4,68,000**	**Ultimate annual recurring**	**... ,,**	**93,600**

Remarks.—**The number of forest labourers' societies which was only eleven as on 30th June 1948 has increased to 124 as on 30th September 1954. The slow increase in the number of forest labourers' societies is partly due to the cautious policy of** consolidation of the existing societies rather than of their expansion followed by the State Government as recommended by the Planning Committee. This policy is being followed in order to ensure that no society undertakes new activities which are beyond its financial capacities. The new forest labourers' societies would, therefore, be registered with due care so that they may not come to difficulties for want of funds, efficient management, etc.

It is accordingly proposed to organise 125 forest labourers' societies in Bombay State during the second five year plan at the rate of 25 societies per year. The object underlying the scheme is to organise the Adivasis and other various tribes inhabiting forest areas into co-operatives and to arrange collection and exploitation of forest produce, its marketing, etc., through them. Experience has shown that the main reason for the unsuccessful working of some of the forest labourers' societies was that they were not in a position to secure the services of efficient hands because of lack of resources at their disposal. It is, therefore, proposed to assist the new forest labourers' societies (as also about 30 old societies which have not completed five years of working) by way of grant-in-aid for management expenses at the rate of Rs. 1,200 per year per society for the first three years of their working.

The entire cost of the scheme is expected to be borne by the Government of India.

SCHEME No. 222.

Name of the Scheme.—**Organisation and grant of financial assistance to Labour Contract Societies.**

Recurring	... Rs.	3,00,000	Non-recurring	... Rs.	*Nil.*
Total	... ,,	3,00,000	Ultimate annual recurring	,,	60,000

Remarks.—Government gives preference to labour contract societies in the matter of entrusting minor works of the Public Works Department and the Forest Department. The District Local Boards and the Municipalities have also been advised to entrust their contracts to such societies. In order to meet the requirements for the several works it is proposed to organise 75 labour contract societies, during the Second Five-Year Plan period, and to give them assistance for management expenses at the rate of Rs. 1,200 per society for the first three years of their working. The total cost on account of assistance to the labour contract societies will be Rs. 1,93,800.

Further in order to ensure that the contracts entrusted to the labour contract societies are executed properly and in time, it is necessary to give technical guidance in the working of labour contract societies in this respect. It is, therefore, proposed to appoint overseers roughly for every 10 societies. It is proposed to give a consolidated pay of Rs. 150 per mensem to such overseers including all allowances. The total expenditure on this account for different years would therefore, be Rs. 1,06,200.

50 per cent. of this total cost of the scheme is expected to be borne by the Government of India.

SCHEME No. 223.

Name of the Scheme.—**Organisation of Co-operative Societies other than Forest Labourers and Labour Contract Societies in Backward Areas.**

Recurring ...	Rs. 1,80,000	Non-recurring ...	Rs. *Nil.*
Total ...	,, 1,80,000	Ultimate annual recurring	,, 36,000

Remarks.—The Backward Class societies (the resources of which are generally very meagre) are not able to secure the services of efficient hands to work as their Secretaries, Accountants, etc. The affairs of these societies are, therefore, sometimes not carried on properly. It is, therefore proposed to organise 50 new Backward Class societies during the Second Five-Year plan period and give them assistance for the first three years of their working at the rate of Rs. 1,200 per year to meet the cost of the management. Similarly from among the existing Backward Class societies such of the societies as have not completed five years working will be assisted at the rate of 10 societies per year. The total cost of five years on account of grants to Backward Class societies for managerial cost is estimated at Rs. 1,80,000.

The Government of India will be requested to bear 75 per cent. of the total cost of the Scheme.

SCHEME No. 224.

Name of the Scheme.—**Organisation of Regional and District Industrial Co-operative Banks.**

Recurring ...	Rs. 48,000	Non-recurring ...	Rs. 1,80,000
Total ...	,, 2,28,000	Ultimate annual recurring	,, *Nil.*

Remarks.—The Co-operative Central Financing agencies are expected to finance all types of co-operative institutions within their area of operation. The Central Financing agencies have not, however, been able to provide adequate financial accommodation to the cottage and village artisans and industrial co-operative societies for various reasons. With a view to providing adequate finance to the artisans and others interested or engaged in the establishment and conduct of cottage and village industries, industrial co-operative societies and their associations, three district industrial co-operative banks for the Belgaum, Bijapur and Sholapur Districts and one regional industrial co-operative bank for the Surat, Broach and Dangs Districts have been organised in the State. It is proposed to organise four more such banks at Hubli, Nasik, Poona and Ahmedabad in the Second Plan period. Government has contributed an amount of Rs. 5,000 towards the share capital of each of the four existing banks. The share capital which these banks could collect in the initial stages and their reserve and other funds would not be adequate to meet the requirements of artisans and industrial co-operative societies. They may also not be able to tap local depositors to any appreciable extent in the initial stages. It is, therefore, proposed to enhance the rate of Government investment in the share capital of the banks from Rs. 5,000 to Rs. 25,000 per bank. As the existing banks have already been granted share contribution of Rs. 5,000 they will be given the balance of Rs. 20,000 during the Second Plan period, so as to bring up the Government contribution to the enhanced rate of Rs. 25,000. The four new banks will be granted Rs. 25,000 each.

It is necessary to subsidise the new banks for the cost of management in the initial stages. It is proposed to grant subsidy to the four new banks towards cost of management at the following scales, for the first three years of their working in the Second Five Year Plan period:—

	Rs.
First Year	5,000
Second Year	4,000
Third Year	3,000

Details of share capital contribution and subsidies towards cost of management at the scales mentioned above are given below:—

For four existing banks.—Share Capital Contribution Rs. 80,000 at Rs. 20,000 (Rs. 5,000 have already been subscribed) per bank.

For four new banks.—Share capital contribution Rs. 1,00,000 at Rs. 25,000 per bank. Rs. 48,000 subsidy at Rs. 12,000 per bank. (Rs. 5,000, Rs. 4,000, Rs. 3,000 for the First, Second and Third year respectively).

SCHEME No. 225.

Name of the Scheme.—**Scheme for contribution to the Share Capital of Industrial Co-operative Societies including District Industrial Co-operative Associations.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	55,70,000
Total	.. ,,	55,70,000	Ultimate annual recurring.	,,	*Nil.*

Remarks.—State partnership has been accepted in principle in the case of Agricultural Credit and Processing Societies in accordance with the recommendations of the Committee of Direction appointed by the Reserve Bank of India. Active participation in the capital and management structure of co-operative institutions by contributing 51 per cent. to the total share capital of such institutions has been envisaged. This principle needs to be accepted in the case of Industrial Co-operative Societies also at all levels. Contribution to the share capital of Industrial Co-operatives is all the more necessary in view of the fact that the membership of these institutions consists of poor artisans with meagre resources. Industrial co-operatives need to be strengthened considerably with a view to enabling them to carry on their activities successfully. Not only are the resources of the primary industrial co-operatives meagre, but even the resources of the federal institutions such as District Industrial Co-operative Associations and District Industrial Co-operative Banks are meagre, in view of the fact that membership of such institutions also consists of individual artisans as well as primary industrial co-operatives who are not able to contribute much to the share capital. Unless, therefore, Government comes forth with a liberal contribution to the share capital of industrial co-operatives at all levels, it is not possible for the industrial co-operatives to make such headway in the right direction and stablise their position. It is, therefore, proposed that Government should contribute not less than 51 per cent. in the share capital of the existing industrial co-operatives as well as the new industrial co-operatives which will be organised under the Second Five Year Plan.

As on 30th June 1954, there were 1,393 industrial co-operatives with a share capital of Rs. 66,22,373. It is observed that on an average 70 industrial co-operatives are organised every year with a share capital of Rs. 50,000. On this basis it can be assumed that by the end of the year 1955-56, there will have been 1,530 industrial co-operatives with a share capital of Rs. 67,20,000. In the first year of the Plan it is, therefore, necessary to contribute to the share capital of 1,530 existing industrial co-operatives an amount of Rs. 68,54,000 so as to make the contribution of Government equal to 51 per cent. of the total share capital of the Industrial Co-operatives. It is, however, proposed to contribute an amount of Rs. 44,20,500 to the share capital of the existing societies, in the first year of the Plan. Secondly it is proposed to organise 6 new District Industrial Co-operative Associations during first year of the Plan period. The minimum share capital which is required to be collected in the case of District Industrial Co-operative Associations is Rs. 5,000 each. Government will have, therefore, to contribute an amount of Rs. 5,100 to the share capital of each of the 6 District Industrial Co-operative Associations each, i.e. Rs. 30,600 in all to the share capital of 6 new District Industrial Co-operative Associations. Thirdly, it is proposed to organise 25 forest labourers' societies and 15 labourers' co-operative societies in the first year of the Plan and to contribute an amount of Rs. 3,000 each to the share of these societies. Thus an amount of Rs. 1,20,000 would be contributed to the share capital of forest labourers' societies and labourers' co-operative societies which would be organised during the first year of the Plan. Further on an average about 70 industrial co-operatives including handloom weavers' societies are organised per year. The minimum share capital that is generally required to be collected in case of primary industrial co-operative societies is Rs. 500 each. Government will have, therefore, to contribute Rs. 510 to the share capital of each of the 70 new industrial co-operatives.

In the second year of the Plan it is proposed to organise 2 District Industrial Co-operative Associations, 25 Forest Labourers' Societies, 15 Labourers' Co-operative Societies and 70 Industrial Co-operatives of other types and industrial co-operatives in backward areas.

In the third year of the Plan it is proposed to organise 1 more District Industrial Co-operative Association, 25 Forest Labourers' Societies, 15 Labourers' Co-operative Societies and 70 other types of industrial co-operatives and industrial co-operatives in backward areas.

In the fourth year of the Plan it is proposed to organise 1 more District Industrial Co-operative Association, 25 Forest Labourers' Societies, 15 Labourers' Co-operative Societies and 70 other types of industrial co-operatives and industrial co-operatives in backward areas.

In the last year of the Plan it is proposed to organise 25 Forest Labourers' Societies, 15 Labourers' Co-operative Societies and 70 other types of industrial co-operatives and industrial co-peratives in backward areas.

The industrial co-operatives and associations which will be organised during the second, third, fourth and fifth years of the Plan period will also be associated on the same basis as mentioned in para. 2 above and hence the total cost on account of contribution to the share capital of the different types of industrial co-operatives will be Rs. 55,70,000 of which 50 per cent. would be contributed by the Central Government.

INDUSTRY AND MINING

(Geological Surveys and Prospecting)

Scheme No. 226.

Name of the Scheme.—**Expansion of the Geological Section of the Department of Industries.**

Recurring	... Rs.	94,500	Non-recurring	... Rs.	10,000
Total	... „	1,04,500	Ultimate annual recurring	„	19,000

Remarks.—The Bombay State has large mineral resources. In addition to the iron ore deposits in the State there are deposits of ilmenite, chromite, manganese ore, glass, sand, asbestos, soap, stone, etc. for which detailed surveys are necessary if these minerals are to be properly exploited for being utilized as materials of various basic industries. It is also necessary to devise proper methods for extraction of the ores and benefication. The Planning Commission has laid great stress on the systematic and planned development of the mineral resources of the country so as to hasten industrialisation. The various District Collectors have also made requests for mineral surveys of their respective districts. For this purpose intensive survey of resources, investigation of the reported occurrences and their proper classification is essential. This work will have to be undertaken particularly in the districts of Broach, Panchmahals, Banaskantha, Sabarkantha, Kaira, Ratnagiri, Kolhapur, Thana, North Kanara, Belgaum, Bijapur and Dharwar. Such surveys are undertaken by the Geological Survey of India but the Western Region Office of the Geological Survey of India has approached the State Government for necessary assistance and co-operation of the State Organisation in the matter. In view of this and in order to enforce the Mines and Minerals Act, 1948, and the Mineral Concession Rules, 1949, more effectively, it is proposed to expand and strengthen the Geological Section of the Department of Industries during the period of the Second Five Year Plan, by addition of the following staff:—

1.	Deputy Director of Industries (Geol.)	...	1	Rs. 350—1,100 (Mof.).
2.	Geological Assistant ...	...	1	Rs. 160—375 (Mof.).
3.	Head of Branch ...	...	1	Rs. 170—250.
4.	Steno-typist ...	...	1	Rs. 77—200 *plus* allowance.
5.	Peons ...	...	2	Rs. 35—40.

Total cost of the scheme comes to Rs. 1,04,500 including non-recurring expenditure of Rs. 10,000.

INDUSTRY AND MINING

(Miscellaneous)

Scheme No. 227.

Name of the Scheme.—**Establishment of a permanent Industrial Exhibition in Bombay.**

Recurring	.. Rs.	*Nil.*	Non-recurring	..	Rs. 30,00,000
Total	.. ,,	30,00,000	Ultimate annual recurring .	,,	*Nil.*

Remarks.—Industrial development in India and particularly in the State of Bombay has now reached a stage when it is necessary that industrial products should be widely advertised. Bombay as the "Gate Way of India" is the place where it should be possible for Indian industries to exhibit their goods to visitors from other parts of the country and to tourists and businessmen from abroad. In order to achieve this object, it is proposed to assist in the organisation of a permanent exhibition of industrial products in Bombay. Beides manufactured goods the exhibition will contain products of small scale and cottage industries as well as handicrafts. The exhibition is proposed to provide facilities for regular exhibition of products in an attractive manner as also for certain essential services and entertainments of the visitors.

Provision is made in this scheme for a loan of Rs. 30 lakhs which may be advanced on a long-term basis to the organisers of such exhibition to enable them to meet the initial non-recurring expenditure.

Scheme No. 228.

Name of the Scheme.—**Adoption of Metric System of Weights and Measures in Bombay State.**

Recurring	.. Rs.	78,000	Non-recurring	..	Rs. 17,000
Total	.. ,,	95,000	Ultimate annual recurring .	,,	*Nil.*

Remarks.—It has been decided by the Government of India to introduce gradually the Metric System of Weights and Measures in the country. Necessary steps in this direction have, therefore, to be taken in this State. A Standing Metric Committee to make recommendations in this regard has already been appointed by the Government of India and the State Governments have been requested by them to set up their own committees to consider problems and difficulties which they are likely to encounter in the change-over from the foot-pound system to the metric system. Accordingly the Government of Bombay has appointed a representative Committee. Until the recommendation of the Central Standing Metric Committee are available, it is not possible to make any precise estimates of the cost involved in the change-over during the Second Five-Year Plan period.

The change-over from foot-pound system, prevailing at present, to metric-system, will be carried out in stages so as to prepare ground for the change with the least possible disturbance and inconvenience to the trade, industry and the public. The first stage is to be devoted to publicity and propaganda, the second to the introduction of metric system in Central and State Government Departments and public bodies and the final stage for complete introduction of the new system.

During the Second Five-Year Plan period intensive educative propaganda will be carried out in favour of metric system. The State Government Departments will be advised to initiate designing their new schemes of development on the metric system with the object of going over to that system entirely at an appropriate stage. Necessary advice and guidance will also be given to the public so as to avoid difficulties for them in future after the introduction of the metric system.

This work would involve considerable amount of correspondence with various interested parties, preparation of posters, etc. and field work to explain the new system for which additional staff will be appointed. It is also proposed to purchase a set of Secondary standards and a set of working standards in metric system for demonstration purposes and for checking of standard Weights and Measures in metric system if and when presented by any trading association or body. For this purpose an *ad-hoc* provision of Rs. 95,000 is being made in the Second Five-Year Plan out of which a sum of about Rs. 17,000 will be spent for purchase of two sets of aforesaid standards.

SCHEME No. 229.

Name of the Scheme.—**Establishment of a Government Test House at the Industrial Research Laboratory, Matunga.**

Recurring	.. Rs.	80,000	Non-recurring	.. Rs.	60,000
Total	.. ,,	1,40,000	Ultimate annual recurring	.. ,,	17,000

Remarks.—It is proposed to establish a Test House at the Industrial Research Laboratory, Matunga, by installing additional equipment at the Laboratory for chemical processes and constructing additional building and/or floor. The Laboratory is already carrying out the test work of (1) Minerals, (2) Chemicals, (3) Oil Seeds, Oil Soap, (4) Paints, Varnishes, (5) Fuels and (6) Other miscellaneous items like ink, starches, etc. During the Second Five-Year Plan period, it has been proposed to take up the work of analysis of paints, pigments and varnishes. To accommodate these activities the Laboratory building will have to be extended involving an expenditure of Rs. 60,000. Equipment to the extent of Rs. 60,000 will also be required to be purchased. The Scheme is proposed to be implemented in two stages.

2. With the proposed expansion of the Test House, it will be possible to assist small-scale and middle-scale industries in testing their raw materials and finished products and also to solve technical difficulties in the process of manufacture. These tests will help to improve the products obtained in the processes.

3. The details of the cost on account of the additional staff, equipment, building etc. for the expansion of the laboratory during the Second Plan period are as shown below :—

	Rs.
Non-recurring—	
(1) Equipment	60,000
Recurring—	
Pay and allowances of Officers and staff and contingencies ..	80,000
Total, Non-recurring and recurring	1,40,000
Ultimate annual recurring	17,000

Scheme No. 230.

Name of the Scheme.—**Expansion of the Industrial Chemist's Laboratory, Baroda.**

Recurring	.. Rs.	29,900	Non-recurring	.. Rs.	1,00,000
Total	.. „	1,29,900	Ultimate annual recurring .	„	6,000

Remarks.—The Industrial Chemist's Laboratory, Baroda, was established in the year 1936-37 by the ex-Baroda State and it was in charge of the Industrial Chemist to the then Government of Baroda.

On the merger of the ex-Baroda State with Bombay in 1949, the activities of the Industrial Chemist's Laboratory, Baroda, have been confined to handling of local problems. A skeleton staff as indicated below has been retained :—

No.	Designation	No. of posts	Grade Rs.
1	Assistant Industrial Chemist	1	220—650
2	Junior Chemist	1	150—225
3	Clerk	1	46—130
4	Laboratory Assistant	1	46—85
5	Peon	1	30—35

Prior to the merger of the State the (i) Industrial Chemist's Laboratory, (ii) Public Health Laboratory, (iii) Agricultural Chemist's Laboratory, (iv) Central Excise Laboratory and (v) Drugs Laboratory were housed in the same building and it was possible for one laboratory to make use of the equipment and library facilities belonging to other laboratories. But now all these laboratories, except the Industrial Chemist's Laboratory, have been shifted to other premises and hence it is not possible to avail of these facilities. Consequently it is not possible at present with the equipment available to take up analytical and investigation work to the extent that was possible during the pre-merger days. The activities of the Industrial Chemist's Laboratory, Baroda, are, therefore, restricted to the analysis of such samples for which facilities are available with the Laboratory at present and help to a certain extent in solving the difficulties of various cottage and small scale industries in their day to day problems. It also renders technical advice and has been acting as information bureau. However, in view of the limited number of technical personnel and for want of adequate equipment and library facilities, etc., it has not been possible to cater to the needs of cottage and small scale industries to the extent to which it is needed and thus help the industrial community.

Barring the two institutions, " ATIRA " at Ahmedabad and " TAIRO" at Baroda, which are specialised in and restrict their activities to the Textiles, the Industrial Chemist's Laboratory, Baroda, is the only Laboratory giving general technical and analytical assistance to the interested parties in the northern regions of the State. The Industrial Chemist's Laboratory, Baroda, at present has been accepting samples from public and industrial concerns and issuing certificates on receipt of necessary fees. In order to provide such facilities to the public and industrial concerns in the northern region of the State, it is desirable to establish a small testing section attached to the Industrial Chemist's Laboratory, Baroda, to carry out tests on the lines indicated in Appendix A below. The function of the testing section will be to issue test certificates in respect of chemicals and chemical products, etc., for which there would be adequate equipment available when the proposed scheme is put into operation. Further with the proposed additional equipment and personnel and with the existing facilities available it will be possible for the laboratory to extend all possible facilities to the cottage and small scale industries in improving the technique of production and in solving such other difficulties as they might have come across in their day to day working.

The present accommodation at the disposal of the Industrial Chemist's Laboratory, Baroda, is inadequate for the proposed expansion and no other premises are available which can be utilised for the same. Further the Laboratory is housed in the University Buildings and the University authorities have no other spare accommodation that could be allotted to the Laboratory. In view of this it would be necessary to have an independent building constructed at some suitable site. The building will have a built up area of about 5000 square feet so that the present proposed Industrial Chemist's Laboratory as well as the additional staff and equipment etc., under the expansion scheme may be housed in the same place.

For this purpose it is proposed to entertain certain additional staff, the expenditure on which is estimated to be Rs. 29,900 for five years. The cost of the additional buildings, equipment, etc. is estimated at Rs. 1,00,000. The total cost of the scheme during the Second Plan period would thus be Rs. 1,29,900.

APPENDIX "A".

Names of Items to be tested under the proposed Schemes

(1) Minerals and Ores :—

Complete analysis of—

(*a*) Manganese Ore.
(*b*) Iron Ore.
(*c*) Bauxite.
(*d*) Chromite.
(*e*) Lime Stone.
(*f*) Clays and Silicates.

(2) Chemicals :—Complete analysis of selected Chemicals.

(3) Complete analysis of Oil Seeds, Oil Cakes, Oils, Soaps, etc.

(4) Miscellaneous :—

Complete analysis of—

(*a*) Inks.
(*b*) Water-Industrial Analysis.
(*c*) Cement-Chemicals Analysis.

(*d*) **Starches.**

(*e*) **Gums.**

(*f*) **Fertilisers—Routine Analysis.**

(*g*) **Alloys.**

SCHEME No. 231.

Name of the Scheme.—**Establishment of an Industrial Chemist's Laboratory at Poona.**

Recurring	... Rs.	67,700	Non-recurring	... Rs.	1,00,000
Total	... "	1,67,700	Ultimate annual recurring	"	14,000

Remarks.—Industrial development in Poona and areas round about Poona has reached a stage where it appears desirable that some kind of impetus and technical assistance is considered necessary to encourage development of existing industries and development of future industries on the right lines. There are good many chemical, food, mineral and forest industries in this region and there are possibilities of development of these in the near future. Since there is no chemical laboratory in this region which could assist and solve the problems of such industries it is proposed to establish an Industrial Chemist's Laboratory at Poona on the lines similar to the one at Baroda. The staff required for this purpose is 1 Assistant Industrial Chemist, 1 Research Assistant, 1 Junior Chemist, 1 Clerk and other normal Laboratory staff. The total cost of the scheme is Rs. 1,67,700.

SCHEME No. 232.

Name of the Scheme.—**Industrial Research and Pilot Plants.**

Recurring	... Rs.	1,40,000	Non-recurring	... Rs.	60,000
Total	... "	2,00,000	Ultimate annual recurring	"	*Nil.*

Remarks.—The importance of industrial research in the process of industrial development cannot be overemphasised. Industrial development and scientific research go hand in hand and research in the technique of production, the suitability of raw materials for production of various commodities, possibility of utilising the raw materials available in the country in as many ways as possible, helps in minimising the costs of production and also in broadening the range of products that can be obtained from the available resources. Besides feasibility of various new processes materials and products that are yielded by constant research from the industrial point of view has also to be tested before they can be recommended to the industrialists in the country and for this purpose pilot plants have to be undertaken as and when necessary.

With this aim in view, Government has been setting apart some grants for industrial research and establishment of pilot plants every year. The State Industrial Research Committee and the Pilot Plant Committee appointed by Government considerd the various schemes submitted to them and recommended them to Government for grant of requisite financial assistance to the parties undertaking such schemes at recognised institutions. The Industrial Chemist's Laboratories of the Department of Industries are also working upon special problems of industrial research and helping the small industrialists out of their difficulties. Assistance of the University Department of Chemical Technology is also obtained in the task of research by awarding scholarships to research students working therein on certain specific problems.

In view of the large scale industrial development envisaged under the Second Five-Year Plan, it has been decided that a provision of Rs. 2 lakhs be made for the Industrial Research and Pilot Plants that may have to be undertaken in addition to the work done at the Industrial Chemist's Laboratories.

For this purpose it would be necessary to provide some additional accommodation at the existing Industrial Chemist's Laboratory Building and equipment for which a sum of Rs. 60,000 is earmarked out of Rs. 2 lakhs.

TRANSPORT AND COMMUNICATIONS

(ROADS)

SCHEME No. 233.

Name of the Scheme.—**Road Development.**

Recurring	... Rs. *Nil.*	Non-recurring	... Rs. 12,65,00,000
Total	... ,, 12,65,00,000	Ultimate annual recurring	,, *Nil.*

Remarks.—The programme for Road Development for the five year period ending 1955-56 contemplated construction and improvement of 1075 miles of metalled and unmetalled roads, cement concreting of 838 miles of important roads carrying heavy traffic and construction or improvement to 60 bridges. A provision of Rs. 11·64 crores was made during the period of the First Five-Year Plan for this purpose. Against this provision, a total expenditure of about Rs. 16·75 crores is expected to have been incurred at the end of the First Plan period on construction or improvement of 1,140 miles of metalled and unmetalled roads, cement concreting of about 600 miles of important roads and construction of about 30 bridges. Work on several roads and bridges which is in progress at present will be continued during the Second Plan period. During that period an amount of Rs. 8 crores will be utilised for completion of these works and an amount of Rs. 1 crore will be utilised for new works of inescapable nature. In addition to this, a programme of National Highways, Express Highways, Central Road Fund works and centrally aided Road works in Scheduled Areas, costing in the aggregate Rs. 14 crores, is also proposed to be undertaken during the period of the Second Five Year Plan. However, as this programme is to be included in the Central Part of the Second Plan, the Central share of expenditure for these works is not shown in the State Plan. The State Government's share of Rs. 3·65 crores on this programme is, however, provided in the State Plan.

SCHEME No. 234.

Name of the Scheme.—**Village Approach Roads.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 4,00,00,000
Total ... „ 4,00,00,000 Ultimate annual recurring „ *Nil.*

Remarks.—The financial position of the local bodies in this State is not generally such as would enable them to construct, maintain and repair roads in their areas entirely from their own funds. Government has accordingly been sanctioning grants to local bodies for this purpose for the last several years and it is proposed to continue to grant assistance to local bodies during the Plan period. A provision of Rs. 4,00,00,000 has accordingly been made in the Plan.

SCHEME No. 235.

Name of the Scheme.—**Road-cum-Research Institute.**

Recurring ... Rs. 10,00,000 Non-recurring ... Rs. 5,00,000
Total .... „ 15,00,000 Ultimate annual recurring „ 2,00,000

Remarks.—The Central Board of Irrigation and Power had suggested that every State should have its own Engineering Research Station. The State Government had under consideration for a long time the setting up of a full-fledged Engineering Research Institute for research in various matters pertaining to Irrigation and Roads and Public Health Engineering. The Bombay State was in the fore-front of Engineering Research in the past and to restore to it its rightful place it is proposed to establish a full-fledged Research Institute of this type in this State. The details of the Scheme are being worked out. The estimated cost of the Scheme would be about Rs. 65,00,000 for the first five years. The break up of the cost is as under :—

Rs. 40,00,000 for Irrigation and Allied Research.
Rs. 15,00,000 for Roads and Constructional Research.
Rs. 10,00,000 for Basic Research on various materials, etc.

The provision for Irrigation and allied Research and for Basic Research on various materials has been made under Major Irrigation Projects. A provision of Rs. 15 lakhs is proposed here for Road and Constructional Research.

TRANSPORT AND COMMUNICATIONS

(ROAD TRANSPORT)

SCHEME No. 236.

Name of the Scheme.—**Extension of Nationalisation of Passenger Transport.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 3,75,00,000
Total ... „ 3,75,00,000 Ultimate annual recurring „ *Nil.*

Remarks.—The Scheme of Nationalisation of Passenger Transport in so far as it relates to taking of existing routes in operation was nearly completed by March 1956. During the Second Five Year Plan period, extension of transport services on additional routes in various Districts will be necessary due to various reasons, viz. increase in population, improvement of roads and construction of new roads and travel-more-habit of the public. This increase in traffic is estimated at 5 per cent. every year, and accordingly the State Road Transport Corporation will be required to increase its fleet for additional Schedules by about 150 every year, which means that 781 additional vehicles during the next five year period will be required. The total cost for 781 vehicles at Rs. 38,500 per vehicle will come to Rs. 300·70 lakhs.

The construction programme for this scheme could not be completed in the First Five Year Plan due to difficulties in land acquisition proceedings and also due to paucity of funds. Some portion of construction programme has, therefore, to be carried over to the Second Five Year Plan. The programme will cover 4 workshops, 29 depots, 74 garages, 143 bus stations, 15 divisional head quarters offices, 3 depots for the experimental scheme of goods transport and construction of a few welfare centre and other structures. The total cost of these works is estimated to be Rs. 210·57 lakhs.

It is also proposed to construct residential quarters for housing the lower paid staff i.e. some Class IV and Cl. III employees, not coming within the scope of the subsidised Industrial Housing Scheme of the Central Government. It is proposed to build about 80 tenements at a cost of Rs. 3,000 each for Class IV employees and about 749 tenements at a cost of Rs. 5,000 each of Class III employees. The total cost is estimated at Rs. 41·08 lakhs.

The total cost of the Canadian vehicles and other equipment received under Colombo Aid Plan together with customs duty initially borne by the Union Government is to be repaid by the Corporation to the Union Government in 10 years from 1956-57 to 1965-66. The total loan payable comes to Rs. 350·00 lakhs out of which Rs. 175 lakhs at Rs. 35 lakhs per year will have to be paid to the Union Government by 1961. Similarly the loan of Rs. 88·34 lakhs advanced by the State Government to finance the expenditure incurred by the State Road Transport Corporation for absorbing the Canadian Aid is also to be paid in 5 instalments at Rs. 18 lakhs each from 1955-56. During the Second Plan period an amount of Rs. 72·00 lakhs will, therefore, be required. Total estimated requirements on account of repayment of loans to the Union and State Governments will thus come to Rs. 247·00 lakhs.

It has been proposed that the present fleet of petrol vehicles owned by the State Transport Corporotion should be replaced by diesel vehicles when they come up for scrapping. However, while making provision in the depreciation fund, the depreciation credits for petrol vehicles in operation are calculated on the basis of the original cost of petrol vehicles. This means that at the time of replacement of these petrol vehicles funds available will be equal to the cost of the petrol vehicles replaceable whereas these will have to be replaced by new diesel vehicles whose cost is nearly two-and-a-half times that of petrol vehicles. The conversion of this part of the fleet from petrol to diesel involves an extra capital cost of Rs. 22,680 per vehicle. This extra expenditure required for replacing petrol vehicles will have to be provided for as extra capital. Some of the petrol vehicles will have already been replaced before the end of the First Five Year Plan and a number of them will have to be replaced during the Second Five Year Plan. The total expenditure required to be incurred in this respect during the Second Five Year Plan is estimated at Rs. 90·65 lakhs.

The total cost of the scheme works out to Rs. 890 lakhs out of which the contribution from the State and the Central Governments during the Second Plan period is estimated at Rs. 570 lakhs, as shown below, the blance of the cost being met by the State Road Transport Corporation from its own funds to the extent possible.

		Rs. in lakhs.	
State Government	..	375·00	(Capital investment).
Central Government (Railways' contribution).		195·00	(Capital investment).
Total	..	570·00	(Capital investment).

Only the State Government's share is being shown in the State Plan as the Centre's share of investment will be shown in the Central Plan.

TRANSPORT AND COMMUNICATIONS

(PORTS AND HARBOURS)

SCHEME No. 237.

Name of the Scheme.—**Development of Intermediate and Minor Ports.**

Recurring	.. Rs.	*Nil*	Non-recurring	.. Rs.	83,00,000
Total	.. "	83,00,000	Ultimate annual recurring	"	*Nil*

Remarks.—Under the First Five-Year Plan a scheme for developing ports and harbours, at a cost of Rs. 32 lakhs was drawn up by this Government. This programme included survey of the intermediate and minor ports on the coast of the Bombay State. The work of survey is being carried out. A Hydrographic Survey Expert whose services had been obtained under the U. N. Technical Administration Board, was guiding the survey parties till the end of June 1955, when his term expired. A separate Marine Sub-Division has also been opened for expediting the implementation of the programme. Besides surveying , the programme also includes provision of navigational aids to a number of minor ports and facilities for landing, wharfage etc. A separate programme estimated to cost Rs. 20 lakhs was also drawn up for the development of port Okha, which is an intermediate port. This cost would be met entirely from the loans made available by the Government of India to the State Government. For completion of the works carried over from the First Five Year Plan period a provision of Rs. 39·44 lakhs has been made in the Second Five Year Plan, which includes a provision of Rs. 16 lakhs for completion of the works at port Okha.

A programme of new works embodying the essential and urgent facilities required by the people has also been drawn up. A majority of the ports in Bombay State is not equipped with the latest aids of navigation and as such much inconvenience is being felt by the navigators, the travelling public and the fishermen. Efficiency in maintenance of navigation aids is of paramount importance for the safety of public. Similarly there are no good landing facilities at many ports along the coast. In the Second Five Year Plan, therefore, it is proposed to construct new jetties, wharves, sheds, etc. or to improve the existing ones at Bhatkal, Honavar, Kumta, Tadri, Karwar, Vengurla, Malwan, Vijaydurg, Musakaji,Parngad, Ranpur, Ratnagiri, Jaigad, Dabhol, Shrivardhan, Murud, Revdanda, Rewas, Elephanta, Versova, Bassien, Arnalla, Savanta, Dahanu, Billimora, Surat,Cambay, Dhollera and Okha. A provision of Rs. 33.56 lakhs has been made for these works. In addition a provision of Rs. 10 lakhs has been made for operation of drag-line excavators and dredging of important minor ports.

EDUCATION

(PRIMARY)

SCHEME No. 238.

Name of the Scheme.—**Training of Primary Teachers.**

Recurring ...	Rs. 14,37,500	Non-recurring ...	Rs. 5,62,500
Total ...	,, 20,00,000	Ultimate annual recurring.	,, 2,97,000

Remarks.—It is essential to provide for an increased number of trained teachers so that they can efficiently manage the basic schools as well as the new schools that will be started during the Plan period. The output of trained teachers till the end of 1954–55 was approximately 3,500 per year. During 1955–56 it is expected to increase by 2,000 per year. During the Second Five-Year Plan period it is proposed to add 12 more classes to Government Training institutions in the State at an estimated cost of Rs. 20 lakhs of which Rs. 5,62,500 is non-recurring expenditure on account of provision for hostel blocks, class-rooms and equipment for craft. The recurring expenditure for these 12 classes for a period of five years comes to Rs. 14,37,500. It is expected that during the Plan period the approximate annual output of trained teachers will be about 6,000. At present the number of teachers in the State is estimated to be about 1,00,000 of which about 57,000 are trained teachers. By the end of the Second Plan period, it would be possible to have 30,000 additional trained teachers.

SCHEME No. 239.

Name of the Scheme.—**Introduction of Compulsory Primary Education.**

Recurring ...	Rs. 2,10,40,000	Non-recurring ...	Rs. 9,60,000
Total ...	,, 2,20,00,000	Ultimate annual recurring.	,, 39,12,960

Remarks.—Compulsory primary education has been introduced since 1947–48 in all places with a population of 1,000 and above according to the 1941 census in the 19 pre-merger districts, and it was applied progressively to children in the age-range 7-8, 7-9, 7-10 and 7-11, from year to year, so that by the end of the year 1951–52, which marked the termination of the Post-War Reconstruction Plan and the beginning of the First Five-Year Plan, children of the age-range 7-11 in the places concerned were brought under compulsion. The total number of children under compulsion at the end of 1951–52 was 17,25,307 (including areas of the authorised Municipalities) and the total number of places under compulsion was 5,232. The total expenditure incurred on compulsion during the years 1947–48 to 1951–52 amounted to Rs. 5,83,01,642. During the First Five-Year Plan beginning with 1951–52 compulsory primary education was extended to all places with a population of 1,000 and over according to the 1951 census, including the merged areas from 1st August 1954. Compulsion has thus been progressively applied from year to year, beginning with the age-range 7-8, so that during the period of 4 years children in the age range 7-11 will be covered by compulsion. Thus the last 2 years of this scheme will extend into the Second Five-Year Plan beginning from 1956–57. Necessary provision for completing the last two stages of the scheme has been included in the Second Plan.

The next step would be to extend compulsion to all places with a population of less than 1,000. This is the first stage of the scheme of compulsion to be introduced under the Second Five-Year Plan. Compulsion, as in the past, will apply progressively under this Scheme to children in the age groups 7-8, 7-9, 7-10 and 7-11, so that during the period of four years, children in the age-range 7-11 in all places except stray villages with a population of less than 200 will be brought under compulsion under the Second Five-Year Plan.

As mentioned above, by the end of 1959–1960 all places within the State will be brought under compulsion for the age group 7-11. Schooling facilities have been generally made available all over the State excepting some stray villages with a population of less than 200 where it is not administratively and economically feasible to start primary schools.

To fulfil the directive of the Constitution, it will also be necessary to extend compulsory education to the age group 11-14 by stages. As an initial measure it is proposed to bring under compulsion children of the age group 11-12 in the year 1960–1961 in villages having a population of 1,000 and above excluding areas of the Authorised Municipalities. The remaining two stages of this compulsion i.e., for the age groups 11-12 and 11-14 and also its extension to areas of the Authorised Municipalities will be taken up after the Second Plan period.

The targets proposed to be achieved under this scheme under the Second Five-Year Plan are as follows :—

Item	Introduction of compulsory Primary Education in villages with a population of			Normal Development	Total
	1,000 and over for children of age range 7-11	less then 1,000 for children of age range 7-11	1,000 and over for children of age range 11-12		
(1) Additional number of pupils to be brought under compulsion and developmental increase during Plan period.	1,14,300	2,05,000	3,15,000	1,25,000	7,59,300
(2) Additional number of teachers to be appointed.	2,540	4,100	7,000	2,500	16,140
3) Total cost (Rs.) ...	1,02,81,690	1,28,91,930	52,27,500	63,48,750	3,53,86,000
(a) Non-recurring ...	2,54,000	4,10,000	7,00,000	2,50,000	16,14,000
(b) Recurring ...	1,02,81,690	1,28,91,930	52,27,500	63,48,750	3,53,86,000
(c) Ultimate annual recurring	35,35,680	57,07,200	97,44,000	34,80,000	2,24,66,880

The above target of 7,59,300 pupils will be reached in five years. The total cost on account of the above schemes of compulsion inclusive of the developmental expenditure will be Rs. 3·7 crores of which an expenditure of Rs. 1·50 crores will be met from the funds of the Community Development Projects and National Extension Service.

SCHEME No. 240.

Name of the Scheme.—**Conversion of Primary Schools into Basic Schools.**

Recurring	..	Rs. 13,33,000	Non-recurring	..	Rs. 27,67,000
Total	..	„ 41,00,000	Ultimate annual recurring	„	9,04,670

Remarks.—Of the total number of 5,898 first grade primary schools in the State, about 2,922 schools have neither introduced craft teaching nor basic education. In pursuance of the policy of Government to introduce basic education it is proposed to convert 1,184 schools into basic schools during the Second Five-Year Plan period. This will be done by introducing the following subjects in the first grade Primary Schools to start with :—

(*a*) Spinning and Weaving in 779 First Grade Primary Schools,

(*b*) Kitchen, gardening and Agriculture in 270 first grade primary schools,

and

(*c*) Card-board Modelling and Wood-work in 135 first grade primary schools.

The scheme of craft teaching will be introduced in the first year in Standard III and V in as many of the 1,184 schools as possible and progressively extended from year to year the higher Standards IV and VI, II and VII and I so that the schools concerned will be converted into full-fledged basic schools during a period of four years. The expenditure on craft-sheds will be minimised by using verandahs of school building with suitable adjustments for class room purposes and the class rooms thus vacated will be utilised as craft sheds. Also, if the pupils' products are made sufficiently attractive and marketable, as is intended, the sale proceeds would be utilised towards the maintenance of the schools.

The total cost of the scheme is Rs. 1,16,00,000 of which Rs. 78,27,760 is non-recurring and Rs. 37,72,240 recurring. Of this total cost Rs. 75,00,000 will be met from Community Development Project and National Extension Service Funds for conversion of schools in the areas covered by the Community Development Project and National Extension Service. The balance of Rs. 41,00,000 only is, therefore, shown here under this Scheme. The Government of India give assistance at the rate of 30 per cent. of the cost on account of the schemes for introduction of craft education and on the basis of the above ratio, an amount of Rs. 12,30,000 is expected to be received as Central assistance. This does not include the Central assistance on the expenditure in Community Development and National Extension Service areas.

SCHEME No. 241.

Name of the Scheme.—**Strengthening of Inspection Staff.**

Recurring	... Rs.	9,49,000	Non-recurring	... Rs.	11,000
Total	... ”	9,60,000	Ultimate annual recurring	”	3,25,170

Remarks.—With the expansion of primary education, which has been planned both on a compulsory and voluntary basis, increased provision for the inspection of and supervision over the primary schools has to be made. Compulsion is proposed to be extended under the Second Plan to all places with a population of 500 to 999 so that it is intended to bring all places with 500 and above within the frame-work of compulsion by the end of the Second Plan. Moreover, in some of the smaller villages the scheme of group schools has already been introduced and steps are being taken to introduce the scheme of peripatetic teachers so as to provide as many of the smaller villages as possible with schooling facilities. To enable schools in small villages served by peripatetic teachers and those set up under the group schools scheme to operate efficiently, provision for a much closer supervision and more frequent advisory and surprise visits is absolutely essential. So far as the extension of compulsion is concerned, the Inspecting Officers have not only to inspect and supervise the schools in their beats, but also to assist in the enforcement of compulsion and in school attendance work. With the abolition of the posts of Attendance Officers, the work of Inspecting Officers has become much more onerous. In view of the expansion of compulsion on the widest possible scale which has been planned and the manifold activities which the Inspecting Officers will have to undertake in connection with the enforcement of compulsion, the organisation of house to house census, school attendance work, coercive measures and such other matters, strengthening of the inspectorial organisation is necessary. At present each Inspecting Officer has about 70 institutions, including Primary Schools, Village Reading Rooms, Social Education Classes etc., to inspect. To enable the Inspecting Officers to function efficiently under the plan and to discharge effectively the various functions entrusted to them it is essential to reduce the number of institutions to be entrusted to each Inspecting Officer to about 50. This should be possible with the help of the Social Education Officers working in the Community Development Project areas. It is therefore, proposed to provide for 90 additional Assistant Deputy Educational Inspectors during the plan period at the rate of about 18 per year.

SCHEME No. 242.

Name of the Scheme.—**Organisation of Refresher Courses for Teachers in Craft Schools.**

Recurring	.. Rs.	3,10,000	Non-recurring	.. Rs.	*Nil*
Total	.. ”	3,10,000	Ultimate annual recurring	”	62,000

Remarks.—The teachers working in Craft Schools have to keep abreast of the latest teaching techniques. It is, therefore, proposed to organise Refresher Courses for such teachers during the Second Five-Year Plan period. The scheme will be started from 1957–1958 and about 2,000 teachers will be admitted to such courses each year. The approximate cost involved is Rs. 3,10,000 (Recurring).

SCHEME No. 243.

Name of the Scheme.—**Educational Surveys.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	60,000
Total	.. "	60,000	Ultimate annual recurring	"	*Nil.*

Remarks.—Educational Surveys were carried out in Ratnagiri District and six other Districts in this State. These Surveys were largely from the point of view of providing educational facilities in the backward areas of those Districts and for Backward Class people. In the circumstances and in view of the time which has already elapsed since these Surveys were organised, it is considered essential to arrange for the Educational Surveys of all the Districts in the State within the shortest possible time. District Educational Handbooks are also under preparation, and if these handbooks are published they would facilitate survey work to a large extent. It would be necessary to set up a Central Committee entrusted with the work of planning the methods and techniques of the proposed Surveys and organising and supervisions of the surveys. Under the direction of the Central Committee the School Board of each District will be required to carry out the survey of its area and to submit the results of the Survey to the Central Committee which will scrutinise the suggestions made thereunder and submit them to Government. The results of such Educational Surveys will be published. The total cost of the scheme of Educational Surveys is estimated at about Rs. 60,000.

SCHEME No. 244.

Name of the Scheme.—**Construction of buildings for lower and upper grade primary schools.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	1,40,00,000
Total	.. "	1,40,00,000	Ultimate annual recurring	"	*Nil.*

Remarks.—The programme of Compulsory Primary Education introduced in the State requires the provision of a very large number of schools buildings. In order to have an order of priority by which construction work could be undertaken in villages which needed school buildings immediately and in order to provide the villages under compulsion a sufficient number of schools, District Building Committees were organised in each District consisting of the Chairman, District School Board, President, District Local Board, Prant Officers, Executive Engineer, the District Local Board Engineer, the Deputy Educational Inspector and some prominent citizens including Members of the Legislative Assembly representing the District.

The District Building Committee could not carry out efficiently the programme of construction for want of funds. In order to provide the necessary funds to meet the urgent requirements of construction, the Bombay Primary Education Act, 1947, was amended in 1951, by the Bombay Primary Education and Housing Board (Amendment) Act, 1951, and powers were obtained to take over the Provident Fund accumulations of the staff of the District School Boards including Primary School teachers from which loans could be given to the District School Boards for construction, extension, and improvement of School buildings and for purchase of sites. Under this Scheme which was started on 1st April 1953 loans are paid on the condition that the amount is fully utilised and the buildings are constructed within one year from the date of allotment. To enable the District School Boards to pay interests and repay the instalments of the loans grants-in-aid are given by the Government to the District School Boards.

During the first four years of the first Five Year-Plan, the total amount of loan or grant sanctioned for the construction of primary school buildings was as follows:

	Rs.
1951–52	16,14,000
1952–53	10,60,635
1953–54	55,36,670
1954–55	58,22,098

It will be seen from the above that it was possible under the new scheme to construct five times as many buildings as were constructed during 1951–52 and 1952–53. It is proposed to provide during the Second Plan period for grant loans of Rs. 20 lakhs every year under this scheme, for construction of new school buildings and about Rs. 8 lakhs per year for repairs to existing school buildings.

In addition substantial grants for construction of school buildings would be made available from the Community Development Projects and National Extension Service funds and from the Local Development Works grants during the Plan period. An amount of Rs. 140 lakhs has been provided under Education. This provision is in addition to the popular contribution which will be received towards construction of School Buildings. The actual number of school buildings to be constructed may be about 14,000 or more depending upon the percentage of popular contribution received.

EDUCATION

(SECONDARY)

SCHEME No. 245.

Name of the Scheme.—**Training of Secondary Teachers.**

Recurring	... Rs.	1,60,000	Non-recurring	... Rs.	1,20,000
Total	... „	2,80,000	Ultimate annual recurring	„	44,800

Remarks.—In view of the expansion in the field of Secondary Education, which has been planned, recruitment to the teaching staff in Secondary Schools is likely to be stepped up to a substantial extent. At present over 40 per cent. of the teaching personnel in Secondary Schools is untrained and with the expected expansion of the teaching cadres the proportion of the untrained element is likely to increase. It is, therefore, desirable to provide for an adequate expansion of the training facilities so as to train as far as may be practicable about 65 per cent. of the teaching personnel in secondary schools during the plan period. The scheme, therefore, provides for training, within a period of about 3 years from the date of recruitment, for a Teaching Degree or Diploma for at least half of the new entrants to the teaching profession, if not already trained as well as for those of the existing untrained teachers who have less than 10 years service. The existing facilities for training in the Secondary Training Colleges and Secondary Teachers' Training Institutes are found to be inadequate to meet the requirements of the expansion programme and additional units of a temporary nature will have to be attached to the institutions concerned to provide for a larger intake of trainees. The present provision for the training of about 800 teachers is proposed to be enlarged so as to provide progressively for the training of 160 additional teachers per year at the end of the Second Five-Year Plan. To begin with 40 additional teachers will be trained during the second year and an additional 40 during every subsequent year so as to reach the target figure of additional 160 teachers by about the beginning of the fifth year. In addition to the expansion contemplated the existing institutions will be required to conduct their normal courses to capacity to meet the normal increase. An *ad hoc* provision of Rs. 1,60,000 is proposed to be made for this purpose over the five years period in addition to the non-recurring provision of Rs. 1,20,000 for capital expenditure in respect of additional buildings, equipment, etc.

SCHEME No. 246.

Name of the Scheme.—**Refresher Courses and Seminars for Secondary Teachers and Head Masters.**

Recurring	..	Rs.	*Nil.*	Non-recurring	.. Rs.	4,30,000
Total	..	,,	4,30,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—In addition to training of the untrained personnel in secondary schools for which provision is being made separately it is proposed to organise periodical refresher courses so that practising teachers including Head Masters can keep themselves abreast of the latest developments in the teaching techniques, curricular improvements, new experiments, etc. About 10,000 Secondary teachers (including Head Masters, etc.) will be admitted to such short term refresher courses of about two weeks duration each to be conducted twice a year by Secondary Training Colleges and the recognised Secondary Teachers' Associations during the Second Plan period. These courses will also include seminars to be specially organised for Head Masters at suitable places. About 2,000 teachers and Head Masters will receive training at such courses per year at an estimated cost to Government of about Rs. 4,30,000. The scheme will be started from 1957–58.

SCHEME No. 247.

Name of the Scheme.—**Establishment of Multi-lateral Schools.**

Recurring	..	Rs.	15,23,000	Non-recurring	.. Rs.	19,39,000
Total	..	,,	34,62,000	Ultimate annual recurring	,,	4,00,000

Remarks.—Under the Government of India's scheme for opening of Multi-purpose schools, the following schools are expected to be started during 1955-56.

Courses.			Government.	Non-Government.	Total.
Agricultural	...	...	3	12	15
Commercial	...	...	25	1	26
Home Science	...	...	7	8	15
Fine Arts	...	...	3	4	7
					63

There are over 1,000 full grade Secondary Schools in this State and there is a great demand from the managements of these schools for conversion into multi-purpose schools, and for provision of liberal grants by Government for this purpose. It is accordingly proposed to convert 80 ordinary Secondary Schools into Multi-purpose Schools, during the Second Five-Year Plan Period.

It is not, however, possible to indicate at this stage the distribution of the proposed schools between different courses. It is proposed to organise a Statewide survey to ascertain the requirements in different courses.

The total cost of the scheme is estimated at Rs. 34·62 lakhs of which Rs. 15·23 lakhs is recurring and Rs. 19·39 lakhs is non-recurring. The Central Assistance towards the cost of this scheme is estimated at Rs. 16·60 lakhs.

SCHEME No. 248.

Name of the Scheme.—**Hostel Facilities for Secondary School students.**

Recurring	...	Rs.	*Nil.*	Non-recurring	... Rs.	10,00,000
Total	...	,,	10,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—In view of the inadequate facilities for Secondary Education in rural areas pupils have to migrate to urban areas for seeking admission to schools. It is desirable to provide hostel accommodation for such pupils as a number of such pupils are not in a position to make suitable arrangements of their own for boarding and lodging. It is, therefore, proposed to encourage provision of such hostels in towns and cities through recognised voluntary agencies of standing by advancing to such institutions loans on suitable terms to enable them to cover as far as possible the initial cost of setting up such hostels. The loans would be repayable on easy annual equated instalments within a period of 25 to 30 years. The rate of interest will be the current market rate. It is difficult to estimate the number of pupils from the rural areas migrating to the urban areas to attend Secondary schools in towns and cities. Approximate estimates about the probable number of pupils for the Second Five-Year Plan have been framed broadly on the basis of the number of pupils in rural secondary schools on 31st March 1954, with provision for an annual increase in the numbers. It is assumed that not more than 25 per cent. of such pupils would migrate to the urban areas and that a certain proportion of them not exceeding 2/3rd would have no suitable arrangements of their own and may have to be accommodated in hostels. On this basis it is estimated that about 13,575 pupils would require hostel accommodation during 1956-57 and that the number of such pupils may rise to about 16,500 by the end of the Second Five-Year Plan period.

As regards the provision for, and the terms under which the loans should be advanced to private agencies, it is difficult to frame realistic estimates in the absence of information as to the resources available with the voluntary agencies concerned who may come forward to start hostels, whether suitable buildings would be available on rents in towns and cities or whether new buildings would have to be put up, the nature and size of private donations and contributions if any, to be received, etc. In the circumstances, it is proposed to make an *ad hoc* provision of Rs. 10,00,000 to be advanced as loan over a period of 5 years to meet the initial expenditure on the setting up of hostels by recognised private agencies of adequate standing. To encourage suitable voluntary agencies to undertake this activity such loans should cover not only the non-recurring capital expenditure on buildings, equipment, etc., but also in suitable special cases, overhead charges, house rent, etc., for a limited period subject to the circumstances and merits of each case. Suitable voluntary agencies of standing will be invited to submit their schemes for hostels in cities and towns with full details and the size of the loans to be advanced and the items of expenditure which it should cover will be determined in each individual case on its merits and circumstances.

SCHEME No. 249.

Name of the Scheme.—**Payment of grants to Secondary Schools.**

Recurring	..	Rs. 1,00,00,000	Non-recurring	.. Rs.	*Nil.*
Total	..	,, 1,00,00,000	Ultimate annual recurring	,,	30,00,000

Remarks.—At present, grants are paid to Secondary Schools in the urban areas at 30 per cent. and in rural areas at 33⅓ per cent. of the admitted expenditure. The expenditure on the payment of maintenance grants at the prescribed rates is increasing every year owing to the opening of new schools, increase in the expenditure of the existing schools due to incremental scales of pay, etc. During the period of Second Five Year Plan, it is proposed to continue the grant-in-aid at the existing rates to the existing schools and the new schools that will come up during the period. The total cost involved is Rs. 100·00 lakhs.

SCHEME No. 250.

Name of the Scheme.—**Loans for construction of School buildings and loans for provision of play-grounds.**

Recurring	..	Rs. *Nil.*	Non-recurring	.. Rs.	80,00,000
Total	..	,, 80,00,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The expansion of primary education proposed to be planned is likely to have its impact on secondary schools, where provision will have to be made for the larger influx of pupils coming from primary schools, particularly in the rural areas. The existing secondary schools particularly in the rural areas will also need to be expanded for this purpose in respect of additional accommodation and adequate provision for class rooms laboratories, libraries, craft work, etc. New schools will also have to be set up chiefly in the rural areas to provide for the number of pupils who may not be accommodated in the existing schools. To enable managements of non-Government Secondary Schools specially in the rural areas to cope with the demand, it is proposed to provide for the payment of building loans to be repaid by them in easy annual equated instalments within a period of 25 to 30 years subject to the usual conditions.

It is proposed to provide Rs. 70,00,000 during the entire period of the Plan for loans to secondary schools for construction of school buildings to the extent of 50 per cent. of the cost of buildings or Rs. [illegible]0,000 whichever is less. The rate of interest will be the current market rate.

The Physical Education Committee of 1945–46 laid great stress on the need to provide play-grounds for Schools and recommended that the recognition of a school may be withdrawn if it failed to procure a play-ground within a stipulated period. Play-grounds are absolutely essential for the proper development of the personality of school pupils. In view, however, of the practical, local and financial difficulties involved, it has not been found practicable to provide for play-grounds so far on a satisfactory basis. To meet the financial difficulties it is proposed to advance loans to the extent of 50 per cent. of the cost of a site or Rs. 5,000 whichever is less, to the school authorities which can be refunded by them within a period of about 25 to 30 years on the basis of equated annual instalments. It is also proposed to issue instructions to the Revenue Authorities to assist in the acquisition of suitable plots in those places, where suitable Government Land is not available and cannot be leased at a nominal rental. The provisions of the Land Acquisition Act, and, in particular, the Emergency Clause, are also proposed to be utilised wherever necessary to speed up the acquisition of suitable plots of land. It is proposed to make an *ad hoc* provision of Rs. 10,00,000 during the entire period of the plan for the advance of site loans.

The total provision for the scheme is thus estimated at Rs. 80 lakhs.

SCHEME No. 251.

Name of the Scheme.—**Loan-Scholarships for pupils in Secondary Schools.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs.	5,00,000
Total	... „	5,00,000	Ultimate annual recurring	„	*Nil.*

Remarks.—The object of this scheme is to provide for financial assistance in the shape of loan scholarships to needy pupils, particularly in the rural areas, who are otherwise capable of profiting from Secondary Education. In the absence of precise information as to the number of pupils in Secondary Schools likely to take advantage of loan Scholarships, it is proposed, to make an *ad hoc* provision of Rs. 5,00,000 to be spent over a period of five years for 220 sets of loan Scholarships (or 880 scholarships) tenable in Standards VIII-XI of High Schools, the value of each scholarship being restricted to Rs. 10 per month.

SCHEME No. 252.

Name of the Scheme.—**Additional scholarships for students in Secondary Schools.**

Recurring	... Rs.	2,40,000	Non-recurring	... Rs.	*Nil.*
Total	... „	2,40,000	Ultimate annual recurring	„	74,778

Remarks.—At present there are 537 sets of open High School Scholarships for non-Backward Class pupils. It is proposed to add 242 sets to cope with the increasing number for non-Backward Class pupils, under the Second Five Year Plan, preference being given in the award of the scholarships to pupils from the rural areas. A provision of Rs. 2,40,000 is proposed for this purpose. Provision for scholarships for Backward Class pupils is being made separately.

SCHEME No. 253.

Name of the Scheme.—**Additional free studentships to pupils in Secondary Schools.**

Recurring	... Rs.	36,00,000	Non-recurring	... Rs.	*Nil.*
Total	... „	36,00,000	Ultimate annual recurring	„	8,80,000

Remarks.—Government at present bears the cost of educating 3 per cent. of the pupils on rolls in Secondary Schools. It is proposed to raise this limit to about 3½ per cent. in the Second Five-Year Plan. On the basis of the number of pupils in Secondary Schools on 31st March 1954, and the anticipated increase during the Second Five-Year Plan period it is estimated that approximately at the rate of about 3½ per cent. provision for free studentships will have to be made for about 99,500 pupils during five years preference being given in the award of freestudentships to pupils belonging to or coming from rural areas. The total cost of the Scheme is Rs. 36 lakhs.

SCHEME No. 254.

Name of the Scheme.—**Audio-Visual Education in Secondary Schools.**

Recurring	... Rs.	2,06,500	Non-recurring	... Rs.	1,93,500
Total	... „	4,00,000	Ultimate annual recurring	„	16,450

Remarks.—The scheme contemplates provision for—

(*a*) Radio Receiving Sets.
(*b*) Projectors.
(*c*) Supply of Sound and Films Strip Projectors to Government Technical High Schools, etc.

(*a*) As a rule Government Secondary Schools have been provided with Radio Receiving Sets but in the case of non-Government Secondary Schools the expenditure on the purchase of Radio Receiving Sets is admissible for the Government grant at the rate of 25 per cent. only, with the result that only a limited number of schools possess Radio Receiving Sets. The ratio of grant payable on this item of expenditure needs, therefore, to be liberalised. It is proposed to provide about 125 schools which have no Radio Receiving Sets with such Sets by the end of the Second Five-Year Plan. To enable such schools to make the purchases it is proposed to liberalise the basis of grants and to admit the expenditure at the enhanced rate of 30 per cent. subject to a limit of Rs. 125 per school. The total estimated expenditure on this account over a period of 5 years would be about Rs. 15,625.

(*b*) About 175 Secondary Schools have so far been equipped with 16 m.m. film projectors. The scheme to pay grants to non-Government schools for the purchase of film projectors has since been discontinued. It is, therefore, proposed to make an *ad hoc* provision of Rs. 37,875 to enable non-Government schools to purchase projectors and to admit the expenditure thereon on a 30 per cent. basis. About 7 to 10 schools every year will benefit from this provision.

(*c*) It has been found necessary to supplement the practical training imparted at the Government High Schools in this State by providing Audio Visual Aids with a view to make the instruction more effective. It is, therefore, desirable to provide each Government school with the necessary equipment for the purpose. There are 45 such schools in this State out of which 2 Technical schools and some 8 other Government schools have got projectors, which leaves some 35 Government Schools to be provided with the necessary equipment. The equipment for Visual Aid comprises—

(*a*) 16 m.m. Sound Projector (estimated to cost Rs. 3,500).
(*b*) Film strip Projector (estimated price Rs. 500); and
(*c*) Films and Films strips (estimated prices Rs. 400 and Rs. 10 respectively)

It is proposed to supply each school with one sound and one strip projector and 9 films and 42 strips to start with. Subsequently each school will be supplied with one film and about 7 strips every year, so that the 35 schools will have some 13 films and 70 strips at the end of the Plan period. These will be circulated amongst all the Government schools including the schools already in possession of projectors at present.

EDUCATION

[Technical and Vocational (Non-University)]

Scheme No. 255.

Name of the Scheme.—**Expansion of the Office of the Director of Technical Education, Bombay.**

Recurring	.. Rs.	2,35,400	Non-recurring	.. Rs.	4,600
Total	.. ,,	2,40,000	Ultimate annual recurring.	,,	61,541

Remarks.—In order to cope with the work arising from the rapid expansion of Industrial and Technical Education, Government set up a special organisation in 1948 with the Director of Technical Education as its Head.

For the implementation of the programmes relating to (*a*) Major and Minor Irrigation, (*b*) Construction of Highways (Road Development), (*c*) Road Transport, (*d*) Agricultural Engineering, (*e*) Development of Major and Small-scale Industries, etc., technical personnel of various categories are required. For this purpose the Department of Technical Education has already undertaken number of Educational Development Schemes in the First Five-Year Plan and many more schemes are contemplated to be undertaken in the Second Five-Year Plan. For consolidation of the work already done in this field and to undertake new schemes in the Second Five-Year Plan, it is very essential to equip the Directorate with adequate supervisory and administrative machinery. It is, therefore, proposed to expand the office of the Director of Technical Education during the Second Plan period by appointing the following additional staff:—

1 Director of Technical Education.
1 Accounts Superintendent.
1 Deputy Inspectress of Technical Education.
1 Superintendent.
2 Assistants.
1 Steno-typist, and
3 Peons.

The total recurring expenditure on account of this staff would be Rs. 2,35,400. A non-recurring expenditure of Rs. 4,600 would be incurred on account of purchase of furniture.

SCHEME No. 256.

Name of the Scheme.—**Establishment of District Polytechnics.**

Recurring	.. Rs. 26,02,000	Non-recurring	.. Rs. 70,00,000
Total	.. ,, 96,02,000	Ultimate annual recurring..	,, 5,20,400

Remarks.—At present there are 8 Engineering Colleges in this State (both Government and non-Government) catering for Diploma Courses in (*i*) Civil, (*ii*) Mechanical and (*iii*) Electrical Engineering. However, there is still dearth of diplomates which may be felt even more keenly when the Second Five-Year Plan is put into execution

It is, therefore, proposed to increase the number of these Institutes by providing 5 Polytechnics in 5 Districts of the State to cater for these courses during the Second Five-Year Plan period. Out of these 5 Polytechnics, one will be started during 1956–57, 2 in 1957–58 and 2 in 1959–60.

The expenditure on account of these Polytechnics is estimated as under :—

	Rs.
Non-recurrent (Buildings and Equipment)	70,00,000
Recurrent (Pay of staff, allowances and contingencies) ..	26,02,000

SCHEME No. 257.

Name of the Scheme.—**Introduction of additional courses at the School of Industry at (i) Bijapur, (ii) Hubli and (iii) V. A. Technical Institute, Bombay.**

Recurring	.. Rs.	3,07,000	Non-recurring	.. Rs.	2,44,000
Total	.. ,,	5,51,000	Ultimate annual recurring ..	,,	79,000

Remarks.—The Technical Education Department runs 17 Industrial Institutes in the State where students are given intruction in various trade courses such as Carpentry, Pattern Making, Motor Mechanics, Tailoring and Cutting, etc. There is, however, no such institute in the City of Bombay. In order to provide facilities for instructions in such courses it is proposed to introduce courses in (*i*) Welding, (*ii*) Motor Mechanic and (*iii*) Radio Servicing, at V. A. Technical Institute (attached to the Elphinstone Technical High School), Bombay.

It is also proposed to expand the Industrial Schools at Bijapur and Hubli so as to increase the facilities for technical education at these Institutes. Additional courses in (*i*) Hand and Powerloom Weaving and (*ii*) Motor Mechanics will be introduced at the Industrial School, Bijapur. At the Hubli School additional courses of Instruction in (*i*) Hand and Power Weaving, (*ii*) Pattern making, (*iii*) Turner, (*iv*) Machinist and (*v*) Welding will be introduced.

The details of the cost of expansion of the Technical Institute at Bombay and the two industrial schools at Bijapur and Hubli during the Second Plan period are given below :—

	Bombay	Bijapur.	Hubli.
	Rs.	Rs.	Rs.
Non-recurring	75,000	89,000	80,000
Recurring	83,000	1,09,200	1,14,800
Total ...	1,58,000	1,98,200	1,94,800

SCHEME No. 258.

Name of the Scheme.—**Expansion of existing Technical High Schools and Opening new Technical High Schools.**

Recurring	... Rs.	4,00,000	Non-recurring	... Rs.	40,50,000
Total	... „	44,50,000	Ultimate annual recurring ...	„	2,21,000

Remarks.—There are in all 35 Technical High Schools run by the State. Of these 23 schools have been established on the recommendations of the Secondary Education Committee from the academic year 1955–56. These Schools are required to be expanded by provision of buildings, equipment and additional staff till they reach full-fledged stage. It is proposed to increase the facilities of technical education available at the existing Technical High Schools by starting additional courses and also to provide additional buildings, equipment and staff to these schools during the Second Five-Year Plan period.

The expenditure on this account is estimated as follows :—

	Rs.
Non-Recurring (Buildings and Equipment)	40,50,000
Recurring (Pay of staff, allowances and contingencies) ...	4,00,000

SCHEME No. 259.

Name of the Scheme.—**Starting of Model clubs in Technical High Schools.**

Recurring	... Rs.	8,000	Non-recurring	... Rs.	10,000
Total	... „	18,000	Ultimate annual recurring ...	„	1,600

Remarks.—In order to give opportunity for students to work in technical trades it is proposed to start model clubs at places where there are technical high schools affording workshop facilities. These workshops will be thrown open to a limited number of boys from the high schools who can come there in the evening and tinker with tools. The boys will be given guidance by the workshop staff to enable them to select a job according to their own liking and to work on it. They will be encouraged to make working models of cars, locomotives, aeroplanes, etc. which are very instructive and catch the imagination easily. Every model club is proposed to be supplied initially with some working models.

The total estimated cost of the scheme will be Rs. 45,000 out of which Rs. 20,000 will be recurring and Rs. 25,000 non-recurring. The Central assistance will be available to the extent of Rs. 60 per cent. of the cost. Only the State share of expenditure which works out to Rs. 18,000 is shown in the State Plan.

SCHEME No. 260.

Name of the Scheme.—**Advance of loans at cheap rate of interest to Secondary Technical Institutions for purposes of buildings and equipment or starting technical courses.**

Recurring	.. Rs.	Nil	Non-recurring	..	Rs. 10,00,000
Total	.. „	10,00,000	Ultimate annual recurring.	„	Nil.

Remarks.—There are at present some Secondary Institutions which desire to diversify their courses with a view to introducing a technical bias. There are also some Institutions already catering for technical courses which desire to extend the scope of their existing courses so as to meet the need for technically trained personnel in various branches. Such institutions are, therefore, required to equip their laboratories well and in some cases even to provide for increased accommodation for workshops etc. As these Institutions find it difficult to get adequate funds to meet the heavy expenditure on equipment etc., it is proposed to advance to them loans on easy terms to enable them to expand their activities. The loans will be given for non-recurrent expenditure only such as buildings, equipment, etc. A provision of Rs. 10 lakhs is accordingly made in the Plan.

SCHEME No. 261.

Name of the Scheme.—**Loan scholarships to poor and deserving students studying in Engineering Colleges in the State.**

Recurring	.. Rs.	93,000	Non-recurring	.. Rs.	Nil.
Total	.. ”	93,000	Ultimate annual recurring .	”	21,000

Remarks.—Government has sanctioned 25 sets of loan scholarships of the value of Rs. 700 per annum to poor and deserving students studying at the Engineering Colleges in Bombay State. These scholarships are intended for Degree Students only. In order to encourage students for the Diploma Courses also it is proposed to institute 8 sets of loan scholarships of the value of Rs. 500 per annum to poor and deserving Diploma courses students in Engineering Colleges in the Bombay State. Expenditure on this account during the Second Five-Year Plan period is estimated at Rs. 48,000.

It is also proposed under this scheme to give 3 stipends of Rs. 150 each and 4 of Rs. 75 each per month to the students passing Degree and Diploma courses respectively to enable them to pursue a course of practical training which will be instituted for such persons, this will detract them from accepting paid jobs immediately after passing the examination. The total expenditure on account of these stipends is estimated at Rs. 45,000 during the Second Plan period.

SCHEME No. 262.

Name of the Scheme.—**Scheme for training of Instructors at Government of India training centre at Koni-Bilaspur.**

Recurring	.. Rs.	60,000	Non-recurring	.. Rs.	Nil.
Total	.. ”	60,000	Ultimate annual recurring .	”	Nil.

Remarks.—In order to train the staff in Technical Institutes in the techniques of teaching, the Department of Technical Education has been deputing Instructors for such training at the Central Training Institute at Koni-Bilaspur. During the Second Five-Year Plan Period 50 Instructors (10 per annum) will be deputed. The expenditure on account of travelling allowance, deputation allowance and appointment of substitutes during the training period is estimated at Rs. 60,000.

SCHEME No. 263.

Name of the Scheme.—**Starting of part-time course in selected centres in Bombay State.**

Recurring	... Rs. 7,70,000	Non-recurring	... Rs. 17,30,000
Total	... „ 25,00,000	Ultimate annual recurring .	„ 1,54,000

Remarks.—Provision for part-time courses in technical subjects, with the exception of a few, does not exist in the State. Such facilities will divert students from crowding at University Courses and will also tend to improve the standard of workmanship in the Industry through scientific grounding in the trades. It will also open to the men in Industry opportunities for advancing their prospects.

For the present, it is proposed to start part-time courses in the four major cities of the State viz., Bombay, Ahmedabad, Sholapur and Poona.

These places are selected firstly because they have Technical Institutes and/or Colleges already so that the expenditure on equipment and building is kept to the minimum, excepting at Bombay where it is proposed to have a separate building. Secondly, the teaching staff will be available from these Institutes/Colleges as well as from the Industry. Thirdly, a very large number of men working in the Industry, can take advantage of the scheme.

The scheme will enable employees working in the industries to better their prospects by undergoing a theoretical course in the trade in which they work for their livelihood.

The list of Courses to be started and the places where they will be run is given in the subjoined statement :

	Duration Years	Places where the courses will be started
1. D.C.E.	5	Bombay, Ahmedabad and Poona
2. D.M.E.	5	Do.
3. D.E.E.	5	Do.
4. D.T.M.	5	Bombay, Ahmedabad.
5. D.T.C.	5	Ahmedabad.
6. Sub-Overseer's course ...	2	Bombay.
7. Auto-Mechanic ...	3	Bombay and Sholapur.
8. General Workshop ...	3	Bombay and Ahmedabad.
9. Refrigeration	3	Bombay.
10. Draughtsman (Civil and Mechanical) ...	2	Ahmedabad, Poona and Sholapur.
11. Metallurgy Certificate ...	3	Ahmedabad and Poona.
12. Weaving Jobber ...	3	Ahmedabad and Bombay.
13. Spinning Jobber ...	3	Ahmedabad and Bombay.

		Duration Years	Places where the courses will be started
14.	Electroplating	2	Bombay.
15.	Cabinet making ...	2	Ahmedabad and Poona.
16.	Refrigeration Mechanics ...	3	Bombay.
17.	Machinists	2	Bombay and Ahmedabad.
18.	Fitters	2	Bombay.
19.	Moulders	2	Ahmedabad.
20.	Dyeing of Textiles ...	2	Ahmedabad.

About 30 students will be admitted to each course per centre except at Bombay where 60 students will be admitted to Civil, Mechanical Electrical Certificates courses and 60 to Civil Engineering Diploma Courses.

The total estimated cost of the scheme is Rs. 25 lakhs out of which Rs. 7,70,000 will be recurring on account of staff and contingencies and Rs. 17,30,000 non-recurring on account of buildings, furniture and other equipment. An amount of Rs. 3,00,000 is expected to be received by way of fees during the Second Plan period.

SCHEME No. 264.

Name of the Scheme.—**Establishment of a Department of Printing Technology.**

Recurring .. Rs. 2,50,000 Non-recurring .. Rs. 6,50,000

Total .. „ 9,00,000 Ultimate annual recurring . „ 48,945

Remarks.—Although the Printing industry is growing in this country, there is no provision to feed the industry with trained personnel. With a view to meeting these requirements of this industry it is proposed to establish a school of Printing Technology in this State as one of the regional schools in the country.

The following staff will have to be appointed for the school—

	Designation	Number of posts
1.	Professor of Printing Technology	1
2.	Lecturers	2
3.	Assistant Lecturers	2
4.	Maintenance Officer	1
5.	Mechanic	1
6.	Clerks	3
7.	Class IV servants (Peons)	6

Of the total cost of the scheme, an amount of Rs. 6,50,000 represents non-recurring expenditure on account of equipment (Rs. 1,50,000) and cost of the building for the Printing School (Rs. 5,00,000) and the remaining Rs. 2,50,000 is recurring expenditure on account of staff and contingencies.

SCHEME No. 265.

Name of the Scheme.—**Expansion of the Vocational Guidance Bureau.**

Recurring	.. Rs.	1,92,000	Non-recurring	.. Rs.	8,000
Total	.. ,,	2,00,000	Ultimate annual recurring .	,,	41,200

Remarks.—The Vocational Guidance Bureau in this State is located in Bombay and ever since its inception in 1950 it has been doing increasingly useful work in disseminating knowledge about occupations, jobs, courses of training etc. and rendering personal advice to various kinds of students and members of the public in the matter of their choice of career. The service is becoming increasingly popular. The Government of India has also started a Vocational Guidance Bureau from 1954-55. By experience it has been found that the Bombay Bureau has not been able to do much original work in the matter of standardising of tests necessary for ascertaining general intelligence, special aptitudes and temperamental qualities, very necessary in rendering correct guidance. The routine work of actual personal guidance, and training of career masters, and spreading general information about occupations takes up much of its time. It is, therefore, necessary to provide extra staff of a specialised type, for the purposes of developing the Bureau into a full Institute of Vocational Guidance, so that the standardisation of tests referred to above and the training of the career masters can be placed on a sound scientific basis.

It is also necessary to make a beginning with the provision of sub-bureaus at convenient centres in the different regions of the State in order that local expert advice in the choice of careers may be available to students and the general public needing such advice. With the increasing complexity of the industrial and economic structure of the society, and the multiplicity of the vocational courses that a student can take up now from Std. VIII onwards, it is necessary to start a Vocational Guidance Department in every large sized secondary school of this State. To train the necessary personnel from nearly 1,200 High Schools of the State and to keep them up-to-date in their information about jobs and techniques of guidance, it is proposed to start 3 more sub-bureaus to serve the different regions of the State. These will be located in the Secondary Training Colleges in Belgaum, Poona and Ahmedabad to enable the Bureau to achieve close collaboration with the training colleges. These Bureaus would serve the different regions of the State in which they are located by training career masters and rendering personal advice whenever it is sought and also by disseminating information about jobs and vocations in their regions. The entire problem of Vocational Guidance Bureaus and the Central Institute of Guidance at Bombay is of the greatest significance in the solution of the problem of educated unemployment and the proposal should be viewed from that point of view. The proposed expansion of the Bureau will also help industrial labour in the choice of careers and placements in confirmation with the Exchanges.

The total cost of the scheme is Rs. 2,00,000.

SCHEME No. 266.

Name of the Scheme.—**Establishment of a full-fledged Directorate of Art.**

Recurring .. Rs. 68,240 Non-recurring .. Rs. 2,980

Total .. ,, 71,220 Ultimate annual recurring. ,, 14,144

Remarks.—The object of this scheme is to create a proper machinery to co-ordinate and control various activities pertaining to different arts in this State. A proper control over the activities such as

(*a*) Art examinations,

(*b*) Controlling Art Institutions,

(*c*) Art Education in various Universities,

(*d*) Picture galleries and Museum, and

(*e*) Work in connection with the various academies set up by the Government of India, would be exercised by the proposed Directorate.

The Sir J. J. School of Art was converted into a Department in 1929. But the scope of its work has so far been restricted to the school of Art proper. The scope of the School itself has increased considerably since 1929. This together with the proposals for the expansion of Art Education under the Second Five Year Plan necessitates the creation of a separate Directorate of Art. The major features of the scheme are —

(*i*) Amalgamation of the present Inspectorate of Drawing and Craftwork with the proposed Directorate of Art.

(*ii*) Creation of a suitable machinery to cope with the expansion of the activities, and

(*iii*) Transfer of the present grant-in-aid to Art Institutions to the Directorate Certain staff will be appointed under the scheme to augment the present staff.

The Total cost of this scheme for five years is Rs. 71,220 out of which an amount of Rs. 2,980 is non-recurring and that of Rs. 68,240 recurring.

SCHEME No. 267.

Name of the Scheme.—**Expansion of Art Education and Development of the Department of Drawing and Painting, teacher training, Arts and Crafts, sculpture and modelling and establishment of a Department of Museum Methods at the Sir J. J. School of Art.**

Recurring .. Rs. 1,79,759 Non-recurring .. Rs. 95,827

Total .. ,, 2,75,586 Ultimate annual recurring. ,, 6,874

Remarks.—The recommendation made by the Art Education Committee for establishing Regional Art Schools in this State has been accepted in principle. To give effect to this recommendation, it is proposed to give grants-in-aid to the private art institutions imparting instruction in various branches of fine arts.

Apart from the Art Education for those who intend to take art as a career it is also proposed that all others may be initiated into the world of art. To achieve this object, it is proposed to open an art centre. This Art Centre is designed to be an educational and cultural institution in the field of fine arts such as Music, Dance and Drama. The activities to be conducted at this centre are as follows :—

(*i*) Planning exhibitions of works of art,

(*ii*) Conducting classes in Drawing and Painting, Music etc., according to local needs,

(*iii*) Arranging musical, dramatic and dance recitals,

(*iv*) Arranging festivals, and

(*v*) Training local students as guides to the visitors to the historical places.

The following staff will have to be appointed under this scheme :—

Designation—	
Secretary	1
Clerk	1
Peons	2

Under this scheme, it is proposed to provide better facilities for the study of Drawing and Painting. For this, the present Greek antiques will be replaced by Indian ones. Arts and some other subjects, which requires additional lecture rooms and special equipment like black-boards, projectors, etc.

As there is no cleavage between art and craft, a provision for training in crafts (educational handwork) will have to be made, especially in view of the proposed change in the Secondary Schools' syllabi. At present there are three categories of Art teachers, viz. Drawing Teachers, Drawing Masters and Art Masters. But, at present, facilities for the training of Drawing Teachers only are provided. As such, candidates appearing for the examinations in Drawing Masters and Art Master Diplomas have been handicapped and are found to be lacking in skill of execution and attitude in teaching. It is, therefore, proposed to start training classes leading to the Diplomas in Drawing Masters and Art Masters. The following staff will have to be appointed under the scheme.

Three Assistant Teachers,
Two Class IV servants.

At present, the Department has facilities to train sons of hereditary craftsmen and others in various art-crafts. It is proposed to expand these facilities to add the following crafts to the existing subjects for training in crafts during the Second Plan period :

(*i*) Ceramics.

(*ii*) Stained glass designs, and Lacquer work.

It is also proposed to expand the existing workshop by augmenting the machinery and strengthening the staff of the workshop. The following additional staff will have to be appointed for implementation of the scheme :

Two teachers,
Two Class IV servants.

The School of Art has, at present, Greek and Roman antiques. It is felt necessary that these should be replaced by suitable specimens of Indian antiques. It is, therefore, proposed to acquire Indian antiques. At present, the Department deals only with modelling and does not provide training in sculpture. To provide for facilities in all the branches of modelling and sculpture, it is also proposed to equip the Department with a bronze casting furnace, a moveable crane, and electric kiln. In order to house this Department after the proposed expansion, on it will be necessary to construct a separate building. The following additional staff will also have to be appointed.

One modeller,

Two workshop Assistants,

Two Visiting Lecturers.

There is a dearth of trained personnel to work as curators and restorers at the various museums and Art galleries which now exist in this State and which are likely to be started in the future. It is, therefore, proposed to provide facilities for training in Museum methods and restoration of works of art at the Sir J. J. School of Art, Bombay; the admission will be 10 students each year. The students trained in this Department will be qualified curators and restorers. The main feature of the training proposed to be provided is the scientific approach in museum methods. The scheme also envisages a complete collection of scientific instruments and slides, film strips, etc. to enable an easy reference in such matters to other museum curators and Directors. The proposed Department will be equipped with a laboratory, a library and slides, a museum of samples and a complete photographic unit to do scientific research work. A staff of one Physical Chemist, one Lecturer in Photography, one Laboratory Expert and two Peons will have to be appointed for the implementation of the scheme.

SCHEME No. 268.

Name of the Scheme.—**Establishment of a Department of a Music, Dance and Drama.**

Recurring	... Rs.	90,950	Non-recurring	... Rs.	13,050
Total	... ,,	1,04,000	Ultimate annual recurring	,,	11,796

Remarks.—There are no adequate facilities for a systematic training in the subjects of Music, Dance and Drama. It is, therefore, proposed to establish a full-fledged Department in the Sir J. J. School of Art, for the promotion of practical training and research in these Arts. The proposed courses will be of a duration of three years for each of the three branches leading to a diploma. It is also proposed to start a post-Diploma Course of two years for research in Music and that of one year for research in dance. The average annual admission to the courses in Music and Dance will be 30 for the Diploma Course and 10 for the post-Diploma Course.

The following staff will have to be appointed for the implementation of the Scheme :—

Designation

1 Head of the Department (Class II).
2 Lecturers in Music.
Visiting Lecturers.
2 Instrumentalists.
2 Class IV servants.

The total five year cost involved in the proposal is Rs. 1,04,000 out of which an amount of Rs. 13,050 would be non-recurring and Rs. 90,950 recurring. It is estimated that the scheme would yield receipts to the extent of Rs. 27,000 by way of fees during the Second Plan period.

SCHEME No. 269.

Name of the Scheme.—**Introduction of—**

(i) a two years course for certificate in Town Planning (evening classes) and
(ii) a two years Draughtsman's course (evening classes).

Recurring	... Rs.	31,020	Non-recurring	... Rs.	*Nil.*
Total	... ,,	31,020	Ultimate annual recurring	,,	10,340

Remarks.—The existing facilities for the training in Architecture are not adequate particularly in the branches of Town Planning and Draughtsmanship for which there is a great demand. It is, therefore, proposed to enlarge the scope of the present Department of Architecture by introducing two years courses in Town Planning and Draughtsmanship. Both the courses will be conducted as the evening classes and the following subjects will be taught—

Town Planning.	Draughtsmanship.
1. Construction of buildings, roads and bridges	1. Tracing.
2. Surveying and levelling.	2. Levelling.
3. History of Town Planning.	3. Perspective.
4. Principles and designs.	4. Designs etc.
5. Town Planning laws etc.	

Two visiting Lecturers and two Studio Assistants will be appointed under this scheme. As these courses will commence from the year 1958-59 cost for four years on account of the scheme will be Rs. 31,020. There will be no non-recurring expenditure.

SCHEME No. 270.

Name of the Scheme.—**Provision of certain essential requirements for students and staff of the Sir J. J. School of Art.**

Recurring .. Rs. 5,000 Non-recurring .. Rs. 90,000

Total .. ,, 95,000 Ultimate annual recurring ,, *Nil.*

Remarks.—Under this scheme it is proposed to provide the following for the staff and students at the Sir J. J. School of Art.

		Rs.
Construction of the Library and study room.	Non-recurring ..	75,000
Furniture ..	Non-recurring ..	15,000
		90,000
	Recurring ..	5,000
	Grand Total ..	95,000

The above facilities are essential, especially in view of the fact that the strength of the School has increased in the past few years.

SCHEME No. 271.

Name of the Scheme.—**Establishment of new fisheries Schools.**

Recurring .. Rs. 1,16,000 Non-recurring .. Rs. 2,18,000

Total .. ,, 3,34,000 Ultimate annual recurring ,, 23,266

Remarks.—**The present fisheries schools have proved exceedingly popular among fisher-folk who have been requesting Government to open more such schools for education of their children. It is, therefore, proposed to establish new fisheries schools in the Kolaba, Baroda and Broach districts during the Plan period, where there are no such schools at present. One of these schools will be established in 1956-1957 and the remaining two in 1957-1958.**

The following staff will be appointed at each of the schools :—

Designation	No. of posts
1. **Head Master (Rs. 70—5—130—E.B.—6—200 plus special pay of Rs. 15 p.m.)**	1
2. **Primary trained teachers (Rs. 40—1—50—E.B.—1½—65). Special pay of Rs. 5 per mensem. Primary untrained teachers (Rs. 35—1—40). Special pay of Rs. 5 per mensem** ...	3
3. **Work-shop Superintendent (Rs. 115 per mensem fixed)** ...	1
4. **Peon (Rs. 30—½—35)**	1
5. **Watchman (Rs. 30—½—35)**	1

Out of the total non-recurring expenditure, a sum of Rs. 2,12,477 is proposed for providing buildings to the four schools already established at Sakrinata, Mithbao in the Ratnagiri District, Majali in the North Kanara District and Kolak in the Surat District. Plans and estimates have been approved for the construction of buildings for the four established schools, referred to above.

EDUCATION

(UNIVERSITY—GENERAL, ARTS AND SCIENCE)

SCHEME No. 272.

Name of the Scheme.—**University Education. Provision of essential facilities at Government Colleges.**

Recurring	... Rs.	Nil.	Non-recurring	... Rs.	32,00,000
Total	... ,,	32,00,000	Ultimate annual recurring	,,	Nil.

Remarks.—Under this scheme it is proposed to provide the following essential facilities at the various Government colleges in this State :—

(1) *Provision of Hostels.*

(*a*) New hostels at Rajaram College, Kolhapur, S. M. T. T. College, Kolhapur, and a combined hostel for the Law College, Bombay, Institute of Science, Bombay, Sydenham College of Commerce and Economics, Bombay, and the S. T. College, Bombay.

(*b*) Extension of hostels at Gujarat College, Ahmedabad.

(2) *Provision of additional amenities for students.*
Canteens at Rajaram College, Kolhapur ; M. N. College, Visnagar ; Karnatak College, Dharwar and Ismail Yusuf College, Bombay.

(3) *Improvement of facilities for sports.*
Pavilions at Rajaram College, Kolhapur, Karnatak College, Dharwar and M. N. College, Visnagar.

(4) Residential accommodation for teachers (Principals' bungalows) at Rajaram College, Kolhapur, S. M. T. T. College, Kolhapur, M. N. College, Visnagar and S. T. College, Belgaum.

(5) Provision of additional space by additions and alterations to existing college buildings at Rajaram College, Kolhapur and Elphinstone College, Bombay.

(6) Improvement of libraries at Rajaram College, Kolhapur, Gujarat College, Ahmedabad, Elphinstone College, Bombay and M. N. College, Visnagar.

(7) Extension of laboratory facilities at Rajaram College, Kolhapur, Karnatak College, Dharwar and Institute of Science, Bombay.

(8) Expansion of Departments of Geology and Mathematics at the Karnatak College, Dharwar, provision of Child Guidance Clinic and Vocational Guidance Bureau at S. T. College, Belgaum and research unit at the S. T. College, Bombay.

(9) Provision of Visual Education equipment at all Government Colleges (12 in number).

The total cost of the **above scheme** is estimated at **Rs.** 32 lakhs.

SCHEME No. 273.

Name of the Scheme.—**Grants to Universities.**

Recurring .. Rs. 23,06,000 Non-recurring .. Rs. 66,94,000

Total .. ,, 90,00,000 Ultimate annual recurring ,, *Nil.*

Remarks.—Different Universities in the State have prepared programmes for the development of existing departments and the opening of new departments, at an aggregate cost of Rs. 141·99 lakhs recurring and Rs. 351·33 lakhs non-recurring. The question of grants to the Universities is under the consideration of the University Grants Commission. On the basis of the general principles laid down by the University Grants Commission for giving financial assistance to the Universities, it is proposed to give assistance to the Universities during the Second Plan period, at the rates mentioned below :—

	Rate of grant
Non-recurring	33⅓ per cent.
Recurring Grant—	
1st year	50 per cent.
2nd year	66⅔ per cent.
3rd year	75 per cent.
4th year	100 per cent.
5th year	100 per cent.

On this basis the total assistance to be given to the Universities in the State will be Rs. 44·14 lakhs, recurring as well as non-recurring, for the whole period of the Second Five-Year Plan, on the schemes approved by the University Grants Commission. The remaining Rs. 45·86 lakhs is expected to be paid by the Universities Grants Commission. The break up of this total assistance into recurring and non-recurring cannot be shown till the details of the schemes to be assisted by the University Grants Commission are settled.

SCHEME No. 274.

Name of the Scheme.—**Increased grant-in-aid to non-Government colleges.**

Recurring ... Rs. 8,00,000 Non-recurring ... Rs. 2,00,000

Total ... ,, 10,00,000 Ultimate annual recurring ,, 1,60,000

Remarks.—At present, grant-in-aid is paid to non-Government colleges at 10 to 20 per cent. of the approved expenditure, including grants towards dearness allowance and maintenance. It is proposed under this scheme to make provision for he payment of grants on the existing basis to new colleges and the payment of special grants to deserving colleges. Provision is also made for the payment of modest building and equipment grants to the extent of Rs. 2 lakhs during the Plan period to needy non-Government colleges.

SCHEME No. 275.

Name of the Scheme.—**Expansion of facilities for post-graduate education and research in Basic Sciences at the Institute of Science, Bombay.**

Recurring	... Rs.	1,85,000	Non-recurring	... Rs.	2,15,000
Total	... ,,	4,00,000	Ultimate annual recurring	,,	32,240

Remarks.—It is proposed to provide additional facilities for research in the Departments of Bio-Chemistry, Chemistry, Botany and Zoology in the Institute of Science at Bombay.

The requirements of the Departments are as under :—

Department		Recurring		Non-recurring
		Staff	Equipment	
		Rs.	Rs.	Rs.
(i) Bio-Chemistry	...	21,000	10,000	60,000
(ii) Chemistry	...	31,300	14,700	70,000
(iii) Zoology	...	29,100	24,900	42,500
(iv) Botany	...	29,100	24,900	42,500
		1,10,500	74,500	2,15,000

Total ... Rs. 4,00,000

SCHEME No. 276.

Name of the Scheme.—**Loan scholarship for all branches of higher education.**

Recurring	... Rs.	Nil.	Non-recurring	... Rs.	25,00,000
Total	... ,,	25,00,000	Ultimate annual recurring	,,	Nil.

Remarks.—Provision for grant of stipends and/or scholarships for the school stages has been made separately. It is felt necessary also to provide for some assistance to deserving students pursuing higher education. It is accordingly proposed to make a lump provision of Rs. 25,00,000 under the Second Five-Year Plan for being advanced as loan scholarships to deserving students to enable them to pursue higher education. These scholarships will be awarded to students of all branches of higher education.

EDUCATION

(HIGHER PROFESSIONAL AND TECHNOLOGICAL INSTITUTIONS)

SCHEME No. 277.

Name of the Scheme.—**Introduction of additional Courses at the R. C. Technical Institute at Ahmedabad.**

Recurring	.. Rs.	2,26,000	Non-recurring	.. Rs.	95,000
Total	.. „	3,21,000	Ultimate annual recurring .	„	50,000

Remarks.—In order to enlarge the scope of the training facilities at the R. C. Technical Institute at Ahmedabad, it is proposed to introduce additional courses in the following subjects at the Institute under the Second Five-Year Plan :—

(*a*) Radio Receiving.

(*b*) Auto Engineering (Certificate course).

(*c*) Power Weaving.

(*d*) Surveyors and estimators.

(*e*) Dyeing Technology.

The above expansion will need construction of buildings worth about Rs. 40,000.

The total non-recurring and recurring cost of this scheme is estimated to be Rs. 3,21,000 during the Second Plan period as shown below :—

	Estimate . cost
(*i*) Non-recurring—	Rs.
Building	40,000
Equipment	54,000
Library	1,000
Total, Non-recurring ..	95,000
(*ii*) *Recurring*—	Rs.
Pay of Staff	87,740
Allowances	60,760
Contingencies	77,500
Total, Recurring ..	2,26,000
Grand Total, (*i*) and (*ii*) ..	3,21,000

Scheme No. 278.

Name of Scheme.—**Expansion of the College of Engineering, Poona.**

Recurring	.. Rs. 1,70,000	Non-recurring	.. Rs. 7,27,000
Total	.. „ 8,97,000	Ultimate annual recurring	„ 20,705

Remarks.—During the First Five-Year Plan the Engineering College at Poona was expanded so as to provide for additional number of students at the Degree and the Diploma Courses. The number of admissions has accordingly increased from 100 to 150 at each of the courses and the necessary staff for the expansion has been appointed. The College has now over 1,200 students on its rolls. It is necessary to provide some buildings for the College to meet the increased requirements. It is also proposed to provide additional equipment for the Metallurgy Department for consolidating the M.E. (Met.) course and introducing a 3 year Diploma Course in metallurgy and the structures Laboratory for conducting research in connection with the development of the field testing machines. It is further proposed to expand the Geological Museum of the College. Such a museum is essential for instruction and research in geology at the College. The expenditure will be only on travelling allowance to the existing staff which will tour round for collecting the required specimens. The details of the buildings are given below :—

1. New Building for Metallurgy Department.
2. Additional cycle stand.
3. Acquisition of land.
4. Hostel for 100 students.
5. New Pavilion and
6. New Library Building.

There is already a nucleus staff and some equipment in the Metallurgy Department of the Engineering College, Poona, and it is felt that there is considerable scope for expansion of this Department by consolidating the course for M.E. (Met.) degree by research. It is accordingly proposed under this scheme to take four students for research so that on an average each member of the staff will have one student working under him. A Diploma course of 3 years in Metallurgy will be started under this scheme. In the branch of Foundry Technology and heat treatment also diploma holders in Metallurgy will fit as operators while in Press shops, rolling mill, etc. they can work as supervisors. About 10 students will be admitted to this course each year. This does not involve any increase in the total number of students at the College. The shortage of trained personnel in Metallurgy which is being currently felt by the Industry will be filled by this scheme.

It is also proposed to develop the structures Laboratory of the Applied Mechanical Department of the College in order to carry out post-graduate research in the Development of Field Testing machine which can be used on sites of Civil Engineering works for improving the standard of workmanship. Cheap and handy mechanics will be devised for testing the quality of materials used on civil works. It will be necessary to appoint the following staff for this work :—

One Assistant Research Officer.
One General Mechanic.
Two Hamals.

The total cost of this scheme is estimated to be Rs. 8,97,000 for five years.

SCHEME No. 279.

Name of the Scheme.—**Expansion of the L. D. College of Engineering, Ahmedabad.**

Recurring ...	Rs.	10,23,000	Non-recurring ...	Rs.	8,26,000
Total ...	,,	18,49,000	Ultimate annual recurring .	,,	1,35,096

Remarks.—It is proposed to provide additional buildings and equipment for the L. D. Engineering College, Ahmedabad, so that instruction may be improved and certain essential requirements met. The existing staff of the College also requires to be strengthened as considerable difficulties are being experienced in managing certain classes and departments, the deficiencies being felt mainly in the junior categories of staff.

This College was originally planned and built for the purpose of providing facilities for 150 students each in the Degree and Diploma classes. Originally only 75 students were being admitted to the Degree course and 100 students to the Diploma class. In view of the heavy demand for admission on the part of students and also on the part of Industries and Government Departments for qualified engineers and in view of the increasing scope of employment for engineers arising from new projects to be taken up under the Plan it is proposed to expand the training facilities at the College to 150 seats in each course, 90 in Civil, 30 each in Mechanical and Electrical.

A provision of Rs. 2,83,000 will be required for the proposed construction work during the Second Plan period. For the additional equipment, staff, etc. a further provision of Rs. 15,66,000 will be necessary as shown below :—

(i) Non recurring— Additional equipment, Furniture, Library.	Rs. 5,43,000.
(ii) Recurring— (*a*) Additional Staff. (*b*) Contingencies.	Rs. 10,23,000

Consequent on the increased admissions a total receipt of Rs. 3,30,000 are estimated over five years by way of fees.

SCHEME No. 280.

Name of the Scheme.—**Grants to Private Engineering Colleges in Bombay State.**

Recurring ..	Rs.	2,10,000	Non-recurring ..	Rs.	3,90,000
Total ..	,,	6,00,000	Ultimate annual recurring ...	,,	42,000

Remarks.—For the consolidation and development plans of the non-Government Engineering Colleges the Government of India are likely to give some financial assistance during the Second Five-Year Plan period. If the central grants are received, it will be necessary to provide for a matching grant by the State Government to those Colleges for setting up their own buildings and providing additional equipment and staff. The total amount of grants which may be required to be paid by the State Government during the Second Five-Year Plan period works out to Rs. 6,00,000 out of which Rs. 2·10 lakhs will be recurring on account of staff and contingencies and Rs. 3·90 lakhs non-recurring on account of building and equipment grants.

SCHEME No. 281.

Name of the Scheme.—**Expansion of Dr. S. S. Ghandhy College of Engineering and Technology, Surat.**

Recurring .. Rs. 5,00,000 Non-recurring .. Rs. 8,34,000

Total .. „ 13,34,000 Ultimate annual recurring . „ 1,00,000

Remarks.—The State Government has accepted a donation of Rs. 5,20,000 from Dr. Sarosh Sorabji Ghandhy towards the establishment of a high grade Technical Institute at Surat. The College named after the donor has started functioning from the academic year 1956-57 and caters at present for the following diploma courses:—

	Admissions.
(*i*) Civil Engineering	20 students.
(*ii*) Mechanical Engineering	20 students.
(*iii*) Electrical Engineering	20 students.

It is proposed to introduce the following additional Diploma and Certificate Courses at the above College during the Second Five-Year Plan period :—

(1) Automobile Engineering	Diploma.
(2) Mechanical Engineering	Certificate.
(3) Electrical Engineering	„
(4) Automobile Engineering	„
(5) Carpentry Engineering	„
(6) Mechanical Apprentice	„
(7) Electrical Apprentice	„
(8) Automobile Apprentice	„
(9) Wireman Apprentice	„
(10) Electrician Apprentice	„

2. At present the College is housed in its own building and with the proposed expansion, it will be necessary to provide the following additional buildings :—

(1) Workshop buildings.

(2) Electrical Laboratory.

(3) Principal's Quarters.

(4) Servants' Quarters.

(5) Students' Hostel and Kitchen Block.

It is proposed to acquire 20 acres of land for the above additional buildings.

The estimates of expenditure on account of this scheme are—

Non-recurring :

	Rs.
(*a*) Buildings	10,20,000
(*b*) Equipment, etc.	3,34,000
	13,54,000
Recurring : (Pay of staff, allowances and contingencies) ..	5,00,000

Out of the Building expenditure of Rs. 10,20,000 Rs. 5,20,000 will be met from the donation. The expenditure to Government will, therefore, be Rs. 13,34,000.

SCHEME No. 282.

Name of the Scheme.—**Establishment of a Central Technical Library at the Victoria Jubilee Technical Institute, Bombay.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	1,50,000
Total	.. ,,	1,50,000	Ultimate annual recurring	,,	*Nil.*

Remarks.—The Victoria Jubilee Technical Institute has a nucleus of a Library where about 100 technical journals are either being subscribed to or obtained gratis. A sum of Rs. 15,000 per annum is already being spent on purchase of books and periodicals. The Library will be well accommodated in the new buildings of the Institute which are now completed. It is proposed to convert the present Library of the Institute into a well equipped Central Technical Library for the benefit of over 1,100 students attending the various Degree Courses and Diploma Courses at the Institute as also for the use of private Engineers, Scientists and those engaged in industry.

The total cost on account of expansion of the Technical Library is estimated at Rs. 1,50,000 during the Second Plan period.

SCHEME No. 283.

Name of the Scheme.—**Facilities of Research at the Victoria Jubilee Technical Institute, Bombay.**

Recurring	.. Rs.	1,00,000	Non-recurring	.. Rs.	*Nil.*
Total	.. ,,	1,00,000	Ultimate annual recurring	,,	20,000

Remarks.—The Victoria Jubilee Technical Institute, Bombay, caters for full-fledged Degree courses in Civil, Mechanical, Electrical Engineering and Textiles and Diploma Courses in Mechanical, Electrical, Textile Manufacture, Textile Chemistery, Sanitary Engineering and Post-Diploma in Automobile Engineering. In order to improve the tone and quality of instruction at the under-graduate level, it is necessary to provide for some research facilities at the Institute by appointment of some staff. The total recurring expenditure on account of pay, etc. will be Rs. 20,000 per annum or Rs. 1,00,000 spread over five years.

EDUCATION

(PHYSICAL EDUCATION)

SCHEME No. 284.

Name of the Scheme.—**Organisation of one year's certificate course in Physical Education.**

Recurring	.. Rs.	1,60,000	Non-recurring	.. Rs.	*Nil.*
Total	.. ,,	1,60,000	Ultimate annual recurring	,,	32,000

Remarks.—In view of the proposed expansion of the programme for training of primary teachers the output of trained teachers is expected to be stepped up substantially and the teachers thus trained will also be qualified for handling physical education activities. As regards secondary schools, the Training Institute for Physical Education, Kandivali, at present provides Diploma Courses in physical education but this provision needs to be supplemented as the supply of qualified physical instructors is not adequate to meet the requirements of the secondary schools.

In addition to the existing three institutions, it is expected that, if increased grants are provided, at least two more institutions conducting one year Certificate Courses would come forward in the course of the Plan period. As the existing provision at the rate of Rs. 10,000 per association is found to be inadequate, it is proposed to increase it to Rs. 14,000. The existing associations will also have to be paid at the increased rate of Rs. 14,000 per association. As regards new associations it is difficult to say whether they will come forward to conduct the courses immediately. In the absence of any reliable data, it is proposed to make an *ad hoc* provision of Rs. 1,60,000 for this purpose for five years at the rate of Rs. 40,000 per year from 1957-58 onwards.

SCHEME No. 285.

Name of the Scheme.—**Expansion of the National Cadet Corps, Senior Division and Auxiliary Cadet Corps.**

Recurring	.. Rs.	9,30,000	Non-recurring	.. Rs.	10,70,000
Total	.. ,,	20,00,000	Ultimate annual recurring (approximately).	,,	4,18,240

Remarks.—The present scheme for the expansion of the Senior Division of the National Cadet Corps contemplates the stabilisation of the present strength as far as the Infantry Units are concerned, and the only Units to be raised duing the Second Five-Year Plan period will be some Technical Units and some Troops of the Girls' Division. Provision has also been made for the construction of buildings for existing Units. This provision is partly for constructing buildings in Government colleges and also for the payment of grants to non-Government colleges who may put up the necessary buildings on the basis of 50 per cent. of the expenditure involved.

2. As regards the Auxiliary Cadet Corps, it is proposed during the Plan period to train 500 new teachers in all in the A. C. C. Provision is also made for the replacement of clothing to A. C. C. cadets at the rate of one set of uniform two years after the initial supply for each cadet.

SCHEME No. 286.

Name of the Scheme.—**Scouting.**

Recurring	.. Rs.	4,000	Non-recurring	.. Rs.	16,000
Total	.. ,,	20,000	Ultimate annual recurring	,,	2,300

Remarks.—In order to encourage Scouting in Standards V to VII of Secondary Schools, it is proposed to make it obligatory for every school with middle school standards to raise one scout troop. About 280 middle schools with about 7,000 pupils are proposed to be brought within the frame-work of this scheme at the rate of 56 troops every year.

The initial expenditure involved in raising the scout troops is Rs. 200 of which Rs. 130 is for equipment and Rs. 70 for other items. The cost to Government at 25 per cent. on equipment and at 30 or 33⅓ per cent. on other items, would be about Rs. 15,600 during the entire period of the Plan.

The recurring expenditure for subsequent years is estimated at Rs. 25 per troop per annum. On this basis the total recurring expenditure for all the troops will be about Rs. 14,000 and the grant due at 30 to 33⅓ per cent. will be about Rs. 4,400. The cost during the entire period of the Plan will be Rs. 20,000 (Rs. 15,600 plus Rs. 4,400).

EDUCATION

(ADMINISTRATIVE STAFF AND TRAINING)

SCHEME No. 287.

Name of the Scheme.—**Periodical Refresher Courses and Camp-cum-Seminars for Gazetted Officers in the Administrative Branch.**

Recurring	.. Rs.	20,000	Non-recurring	.. Rs.	*Nil*
Total	.. ,,	20,000	Ultimate annual recurring	,,	4,000

Remarks.—At present periodical conferences of Educational Officers are being held. These conferences have proved of immense value in exchange of views on the theory and practice of teaching and principles of education. It is felt that in addition to such conferences a refresher course or seminar of officers of the Education Department would serve among other things, as a clearing house for the latest educational ideas and also as a forum for the discussion of educational and administrative matters of a topical interest and for the pooling of available information on important educational and administrative questions. Such a course will also afford opportunities for officers in the administrative branch including those serving in far-flung districts to meet on a social plane in the atmosphere of cordiality and freedom to exchange notes on the various administrative and other problems facing them in their day-to-day administration and to return to their districts refreshed and with up-to-date information on matters essential to the discharge of their duties. It is, therefore, proposed to organise such refresher courses and camp-*cum*-seminars of the duration of about 14 days twice a year. These will be attended by 20 to 30 officers each from among the B. E. S. Class I and B. E. S. Class II officers in the Administrative Branch such as Educational Inspectors, Inspectresses of Girls' Schools, Administrative Officers, Deputy Educational Inspectors, the Inspector of Drawing and Craftwork, the Inspector of Visual Education, the State Inspector of Physical Education, Principals of Government S. T. Colleges, the Vocational Guidance Officer, etc. in addition to some of the officers at the head-quarters organisation such as the Director of Education and the Deputy Directors.

The total cost of the scheme is Rs. 20,000 which is of a recurring nature.

SCHEME NO. 288.

Name of the Scheme.—**In-Service Training in Educational Administration for the direct recruits to the Bombay Educational Service Class I (Administrative Branch.)**

Recurring	.. Rs.	64,000	Non-recurring	.. Rs.	*Nil.*
Total	.. ,,	64,000	Ultimate annual recurring	,,	12,800

Remarks.—Under the re-organisation of the administrative branch of the Bombay Educational Service recently introduced, each district has now an Educational Inspector who is the executive head of the educational administration in the district. Appointments to the Bombay Educational Service Class I (Administrative Branch) are made largely by direct recruitment and to some extent by promotion from below. The direct recruits with high academic qualifications who are appointed in a number of cases have no professional training or any background of administrative experience. Educational administration is becoming highly complicated and technical, as the District Inspector is expected not only to be up-to-date in teaching and inspecting techniques, but also to have a competent knowledge of the various service and financial rules and regulations and a good grasp of the Bombay Primary Education Act and the rules thereunder, the Grant-in-aid Code, the Educational Manual, several financial publications, various executive instructions, orders, etc. issued by Government from time to time on all policy and important questions affecting educational administration. To enable the District Educational Inspector to function efficiently as an Inspector and executive head of the district administration, it is essential to provide for the in-service training of direct recruits extending over a period of about nine months during which they should be trained in the theory and practice of education, educational organisation and administration, educational finance, syllabii and curricula, current educational problems, etc. In addition they should be required to do under proper supervision field work and take the Departmental Examination at the end of their period of training. Provision is, therefore, being made for the in-service training of three direct recruits every year.

The total cost of the scheme is Rs. 64,000 which is of a recurring nature.

Scheme No. 289.

Name of the Scheme.—**Training of Administrative Personnel (Non-gazetted.)**

Recurring	... Rs.	4,51,000	Non-recurring	... Rs.	10,000
Total	... ,,	4,61,000	Ultimate annual recurring	,,	90,215

Remarks.—Under this scheme, provision is proposed to be made for short-term Courses of (1) 3 months' duration for trained graduate Assistant Deputy Educational Inspectors and (2) 6 months' duration for trained primary teacher Assistant Deputy Educational Inspectors to enable them to function efficiently as inspecting officers in the new set up and to keep them abreast of the latest developments in the educational and administrative field. Provision will be made not only for instruction in the latest teaching and inspecting techniques but also to enable the Inspecting Officers to have a competent knowledge of the Primary Education Act, the Primary Education Rules, School Attendance work, compulsory education schemes, primary school organisation including single-teacher and multi-teacher schools, Basic and Craft Schools, group schools, schools served by peripatetic teachers, etc. and to handle effectively the school syllabii and curricula. Three training institutions are proposed to be set up—one for Gujarat, one for Maharashtra and one for Karnatak—and they will be attached to the Graduates' Basic Training Centres at Rajpipla, Dhulia and Dharwar, respectively. The proposed training institutions will be in the charge of Principals in the B. E. S. Class II and will have a staff of one Assistant Lecturer each with the necessary clerical and Class IV staff. These institutions will work generally under the control and supervision of the Principals of the Graduates' Basic Training Centres concerned, so that the trainees will also have an opportunity of doing field work in the compact area attached to each Graduates' Basic Training Centre concerned, in addition to formal work in the Training Institutions will conduct per year one course of 3 months' duration for trained graduate Assistant Deputy Educational Inspectors and another course of 6 months' duration for trained primary teacher Assistant Deputy Educational Inspectors and each course will be restricted to 10 Inspecting Officers so that in the 8 new training institutions in all 60 Inspecting Officers will receive training per year.

The total cost of the Scheme is Rs. 4,61,000 out of which an amount of Rs. 4,51,000 is recurring and Rs. 10,000 non-recurring.

Scheme No. 290.

Name of the Scheme.—**Strengthening of Administrative Staff of the Directorate of Education.**

Recurring	... **Rs.**	**14,60,000**	**Non-recurring**	... **Rs.**	**40,000**
Total	... ,,	**15,00,000**	**Ultimate annual recurring**	,,	***Nil.***

Remarks.—The Second Five Year-Plan of the Education Department contains several schemes costing about Rs. 7·5 crores, with an average annual recurring cost of about Rs. 1·75 crores. For the satisfactory implementation of these schemes it is necessary to appoint additional staff in the office of the Director of Education as well as in the subordinate offices, viz., the Educational Inspectors' offices. Most of the staff will be required to be appointed during the first year of the Second Five-Year Plan (i.e. 1956-57) and the remaining staff during the year 1957-58. All this staff will be required to be continued during the succeeding years of the Plan. The following staff will be appointed :—

Office of the Director of Education—

1 Joint Director of Education.

1 Deputy Director of Education.

4 Superintendents.

6 Supervisory Clerks.

30 Other Clerks.

15 Class IV servants.

Educational Inspectors' Offices—

20 Junior Superintendents.

20 Senior clerks.

28 Junior clerks.

20 Class IV servants.

HEALTH

(HOSPITALS, DISPENSARIES AND HEALTH UNITS)

SCHEME No. 291.

Name of the Scheme.—**New layout and reconstruction of the J. J. Hospital and improvement at the Grant Medical College, Bombay.**

Recurring	... Rs.	*Nil.*	Non-recurring	... Rs. 1,00,00,000
Total	... "	1,00,00,000	Ultimate annual recurring	" *Nil.*

Remarks.—The existing buildings of the J. J. Hospital at Bombay which were constructed several years ago, are now absolutely out-of-date and unsuited to a teaching Hospital. It is, therefore, urgent and essential to have a new lay-out and reconstruct the J. J. Hospital buildings on modern lines. Certain Departments of the Grant Medical College are over-crowded and require expansion. The existing old hostel for male students is also practically unfit for habitation and additional accommodation is, therefore, urgently needed. Proper drainage and water supply for the whole J. J. compound is also one of the most essential and urgent necessity. The rough estimated cost of the whole scheme will be about Rs. 1,00 lakhs as shown below :—

Non-recurring—

		Estimated costs. (Rs. in lakhs)
	I-Hospital	Rs.
1.	Four wings similar to the Elappa Balaram Pavilion, etc., and a new Kitchen and Laundry block, etc., including electrification	53·00
2.	Nurses' quarters	10·00
3.	Improvement to the water supply and drainage arrangements in the J.J. Hospital compound ...	2·00
	Total for I-Hospital (non-recurring) ...	65·00

Non-recurring—

	II-Colleges and other requirements	
4.	Construction of an additional storey over Anatomy School (Dissection only)	1·50
5.	Construction of a new Hostel for students and Resident Medical Officer's Quarters in place of the existing old Hostel (Ground floor and four upper storeys)	15·40
6.	Hostel for students of Sir C.E.M. Dental College ...	4·00
7.	Experimental Laboratory for post graduates (including experimental surgery) and a new Animal House	4·10
8.	Electrification and equipment (Rs. 5 lakhs for each)	10·00
	Total for II-College (non-recurring) ...	35·00
	Grand Total for the whole scheme ...	100·00 approximately.

SCHEME No. 292.

Name of the Scheme.—**Provision of X-Ray Plants at Civil Hospitals.**

Recurring	... Rs.	28,000	Non-recurring	... Rs.	1,20,000
Total	... "	1,48,000	Ultimate annual recurring	"	8,000

Remarks.—It is essential to provide an X-Ray Plant at every Civil Hospital. There are about eight Civil Hospitals in the State where X-Ray Plants are not available at present. It is, therefore, proposed to provide an X-Ray Plant one each at the Civil Hospitals at the Districts, etc. which are not provided with X-Ray Plants at present. Each X-Ray Plant would cost about Rs. 30,000 (non-recurring) and Rs. 2,000 (recurring) per annum.

The details of the cost of the scheme are as shown below ;—

	Rs.
Non-recurring ... ... for 8 X-Ray Plants (at Rs. 30,000 per Plant).	2,40,000
Recurring	56,000
Ultimate annual recurring	16,000
Total	2,96,000

Out of the above total expenditure of Rs. 2,96,000 one half of the cost i.e., Rs. 1,48,000 may be met from the National Extension Service Funds and the remaining amount of Rs. 1,48,000 will be met from the funds under "Medical". Since provision for National Extension Service is separately shown the cost shown here is only Rs. 1,48,000.

SCHEME No. 293.

Name of the Scheme.—**Provision of Ambulance Service to District Headquarter Hospitals.**

Recurring	... Rs.	1,70,000	Non-recurring	... Rs.	64,000
Total	... "	2,34,000	Ultimate annual recurring	"	40,000

Remarks.—In the First Five-Year Plan Government provided Ambulance service at 18 District Headquarter Hospitals. There are, however, still about eight District Headquarter Hospitals where this facility is not yet provided. It is, therefore, proposed to provide one ambulance at each of such District Headquarter Hospitals in such Districts. The cost of each ambulance is approximately Rs. 16,000 non-recurring and Rs. 5,000 recurring. The total cost of the scheme is Rs. 2.98 lakhs out of which Rs. 1·70 lakhs is recurring and Rs. 1·28 lakhs is non-recurring. Out of the non-recurring expenditure of Rs. 1,28,000 one half i.e. Rs. 64,000, will be met from the National Extension Service Funds. All the remaining experditure will be borne from the grants under "Medical". Since the provision under National Extension Service has been made separately only the balance is shown here.

SCHEME No. 294.

Name of the Scheme.—**Expansion of accommodation for Leprosy patients in certain Leprosy Hospitals in Bombay State.**

Recurring	... Rs.	4,00,000	Non-recurring	... Rs.	52,00,000
Total	... "	56,00,000	Ultimate annual recurring	"	1,00,000

Remarks.—From the rough survey and statistics available, it is found that there are nearly 90,000 leprosy patients in the State of Bombay, whereas the accommodation available for them at present is for 2,200 patients, which is quite inadequate. It is, therefore, proposed to provide additional accommodation for leprosy patients by expanding the existing Leprosy Hospitals at Baroda, Sholapur, Surat and Nasik and reconstruction of the Leprosy Hospital at Ahmedabad on a new site. This will provide additional accommodation for about 200 leprosy patients.

The expenditure involved in the scheme will be Rs. 56 lakhs out of which Rs. 4 lakhs will be recurring and Rs. 52 lakhs will be non-recurring (Rs. 51 lakhs for buildings and Rs. 1 lakh for equipment).

SCHEME No. 295.

Name of the Scheme.—**Providing proper Drainage, Water supply, Electricity, Quarters for staff and Dharmashalas at Civil Hospitals.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	20,00,000
Total	.. "	20,00,000	Ultimate annual recurring	"	*Nil.*

Remarks.—There are at present no adequate facilities for Drainage, Water supply, Electricity, Quarters for staff and Dharmashalas for the relatives of the patients at certain Civil Hospitals. It is, therefore, proposed to provide these facilities which are essential for better sanitation and proper working of the Hospitals at an estimated cost of Rs. 20 lakhs during the period of the Second Five-Year Plan. The cost of the Scheme will be Rs. 20 lakhs which will be of a non-recurring nature.

SCHEME No. 296.

Name of the Scheme.—**Establishment of Cottage Hospitals.**

Recurring	.. Rs.	4,00,000	Non-recurring	.. Rs.	61,48,000
Total	.. "	65,48,000	Ultimate annual recurring	"	1,40,000

Remarks.—With a view to improving Medical facilities in rural areas, it is essential to have at least one Cottage Hospital in each District. These Cottage Hospitals will have at least 15 to 20 beds and will provide a co-ordinating link between Rural Medical Relief Centres on the one hand and the District Headquarter Hospitals on the other. There are at present only 9 Cottage Hospitals in this State. 18 additional Cottage Hospitals will be required in order to provide one such hospital to every District. It is proposed to construct buildings for 14 Cottage Hospitals during the Second Five-Year Plan period, out of which about 7 Cottage Hospitals will actually start functioning during the Plan period. The remaining will be opened subsequently. Each Cottage Hospital costs about Rs. 4 1/2 lakhs non-recurring (including equipment) and Rs. 30,000 per annum recurring.

The total Cost of the scheme will be Rs. 65·48 lakhs out of which Rs. 61·48 lakhs will be non-recurring and Rs. 4 lakhs will be non-recurring.

SCHEME No. 297.

Name of the Scheme.—**Expansion and construction of new Mental Hospitals.**

Recurring	.. Rs.	40,000	Non-recurring	.. Rs.	76,60,000
Total	.. "	77,00,000	Ultimate annual recurring.	"	10,000

Remarks.—At present Mental Hospitals are in existence at Thana, Yeravda (Poona), Ahmedabad, Dharwar, Ratnagiri and Baroda. Against the sanctioned accommodation of 2,354 beds, actual number of persons admitted in 1953 in the Mental Hospitals was 3,940.

As the existing Mental Hospitals in this State are very much overcrowded, it is proposed to relieve the congestion by expanding the accommodation in the existing Mental Hospitals including shifting and construction of the Mental Hospital at Ahmedabad on a new site. This will ease the present unsatisfactory position of the overcrowding of patients in the hospitals. Out of the total estimated cost of Rs. 77 lakhs an amount of Rs. 76·60 lakhs represents non-recurring expenditure on account of buildings (Rs. 76 lakhs) and equipment (Rs. 60 thousands) and an amount of Rs. 40,000 represents recurring expenditure.

SCHEME No. 298.

Name of the Scheme.—**Expansion of certain Civil Hospitals.**

Recurring	... Rs.	6,00,000	Non-recurring	... Rs.	35,00,000
Total	... ,,	41,00,000	Ultimate annual recurring	,,	1,90,000

Remarks.—In order to keep up the ratio of beds to students in Medical Colleges as laid down by the University, it has been decided to increase the number of beds at the Sassoon Hospitals by 95, the new building of which is ready. Certain Civil Hospitals, viz., Civil Hospitals at Sangli, Mehsana and Ahmednagar, etc. also require reconstruction as their buildings and sites are not suitable and also there is absolutely no scope for expansion. It is, therefore, proposed to reconstruct the above Civil Hospitals during the period of the Second Five-Year Plan. The total cost of the scheme is Rs. 41 lakhs out of which Rs. 6 lakhs will be recurring and Rs. 35 lakhs will be non-recurring (Rs. 34 lakhs for buildings and Rs. 1 lakh for equipment).

SCHEME No. 299.

Name of the Scheme.—**Increase in the number of beds in the District Headquarters Hospitals so as to raise the bed strength to at least 75 at each District Headquarters Hospital (including provision for Ayurvedic beds).**

Recurring	... Rs.	2,10,000	Non-recurring	... Rs.	7,90,000
Total	... ,,	10,00,000	Ultimate annual recurring	,,	1,00,000

Remarks.—In order to improve District Headquarter Hospitals so that people in the Districts may be able to get all ordinary treatment near their homes and to ease pressure on big hospitals in Bombay, Poona and Ahmedabad, etc., it is proposed to increase the number of beds at some of the District Headquarter Hospitals to at least 75. It is expected that in all about 50 beds will be added by the proposed expansion of the hospitals during the Second Plan period. The total cost of the Scheme is Rs. 10 lakhs out of which Rs. 2·10 lakhs is recurring and Rs. 7·90 lakhs is non-recurring (Rs. 7·50 lakhs for buildings and Rs. 40,000 for equipment).

SCHEME No. 300.

Name of the Scheme.—**Reorganisation of the District Health Scheme.**

Recurring ..	Rs.	2,71,000	Non-recurring ..	Rs.	*Nil.*
Total ..	,,	2,71,000	Ultimate annual recurring	,,	99,000

Remarks.—The District Health Organisation Scheme which was introduced in 1942 in the three Districts of Bijapur, Sholapur and Surat has now been extended to the whole State including the merged areas. In each district there is a Health Officer with 3 or 4 Sanitary Inspectors and an Epidemic Medical Officer. In each taluka there are 2 Vaccinators or Sanitary Sub-Inspectors. In addition most Districts have one Malaria Medical Officer each, in charge of Malaria Control measures. The Medical services in the District are at present in charge of the Civil Surgeons. It is proposed that during the Second Five-Year Plan period all preventive health services in the District should be gradually integrated and the present set up reorganised, so that each District except Banaskantha, Sabarkantha, Amreli, Dangs and South Satara which are small size districts should ultimately have two officers each, viz., a District Medical Officer of Health in lieu of the existing District Health Officer and a Divisional Medical Officer of Health in lieu of the existing Malaria Medical Officer wherever appointed. During the Second Five-Year Plan period this re-organisation will be carried out at the rate of 2 Districts per year. The scale of pay of the existing post of Malaria Medical Officers will be upgraded from Rs. 220—650 to Rs. 350—740 on conversion of the posts into Divisional Medical Officers of Health. The existing District Health Officers and Malaria Medical Officers will be given the necessary training by deputing them to recognised training institutions so that they can be absorbed in the new posts of District and Divisional Medical Officer of Health. During the Second Five-Year Period this reform will be effected in the following Districts :—

1956–57—Poona and Baroda Districts.

1957–58—Sholapur and Surat Districts.

1958–59—Kolaba and Kanara Districts.

1959–60—Kaira and Thana Districts.

1960–61—East Khandesh and West Khandesh Districts.

Each of the above Districts will be divided into two Divisions, each in charge of the District and Divisional Medical Officer of Health respectively. The Divisional Medical Officer of Health will not be administratively subordinate to the District Medical Officer of Health but they will co-ordinate their work. Each District and Divisional Officer will require a Head Clerk-*cum*-Accountant in addition to the existing post of Senior Clerk and two Junior Clerks. The District and Divisional Officers will in addition to their work of supervision of the preventive medical services in the District will also advise the Municipalities within their respective jurisdiction on matters of health and make periodical sanitary inspections of the district municipalities.

This scheme is confined to integration of preventive medical services only and does not contemplate at this stage amalgamation of the curative and preventive medical services. Although in the earlier phases of Malaria Control there were great advantages in providing for a separate field organisation, now that a stage of maintenance has been reached it is proposed to decentralise the actual control programme and to utilise the Malaria Medical Officers for a wider service including all preventive health services and supervision of the Primary Health Units for which a separate scheme has been drawn up. This scheme of integration is on the lines of the integrated scheme which is already in operation in the districts of Kanara and Dharwar.

The total cost of the scheme during the Second Five-Year Plan period works out to Rs. 2·71 lakhs which is of a recurring nature.

SCHEME No. 301.

Name of the Scheme.—**Provision of three more Health Units.**

Recurrent ...	Rs. 10,20,000	Non-recurring ...	Rs.	7,80,000
Total ...	,, 18,00,000	Ultimate annual recurring.	,,	2,39,000

Remarks.—The Government of Bombay has sanctioned 4 chairs of Social and Preventive Medicine of which two have been filled. In addition, 3 more Health Units are proposed to be started in the State to be attached to each Chair on the same lines as the Sirur Health Unit. This would also help in providing facilities for training of the medical students who pass their M. B. Examination and have to spend 3 months for public health work out of 12 months' internment before they are made eligible for the award of the University degree. The share of the Government of India and the Government of Bombay for the establishment of 3 more health units is as follows :—

	Government of India's. Share	Government of Bombay's Share.
	Rs.	Rs.
Towards recurrent cost ...	3,39,834	6,79,655
Non-recurring cost—construction of buildings (Office and Hostel) ...	......	6,00,000
Two Vans for each of the 3 Health Units...	1,20,000	......
Equipment at Rs. 20,000 per unit ...	60,000	......
Total ...	5,19,834	12,79,666

The assistance will be in addition to the Central Subsidy for the establishment of Chairs of Social and Preventive Medicine.

SCHEME No. 302.

Name of the Scheme.—**Opening of one more Mobile Hospital Units.**

Recurring	... Rs.	65,000	Non-recurring	... Rs.	90,000
Total	... ,,	1,55,000	Ultimate annual recurring	,,	90,000

Remarks.—Safe water supply is admittedly the sure means of prevention of cholera. Pending provision of such safe water supplies, there would be need for effective anti-cholera measures including inoculation, disinfection of water supplies, and isolation and treatment of cholera cases. There are at present three Mobile Hospital Units in this State for isolation and treatment of cholera cases. But it will not be possible for these three units only to cope with the cholera situation in peak year of epidemic. With the increase in population it is necessary to increase the number of Mobile Hospital Units by at least one unit to enable them to cope with the work in the event of an epidemic. It is, therefore, proposed to establish one more Mobile Hospital Unit in the last year of the Second Five-Year Plan. In non-epidemic years this staff can be utilised for rural medical service, both curative and preventive.

SCHEME No. 303.

Name of the Scheme.—**Establishment of Primary Health Units.**

Recurring	... Rs.	60,00,000	Non-recurring	... Rs.	*Nil.*
Total	... ,,	60,00,000	Ultimate annual recurring	,,	22,70,000

Remarks.—The Bhore Committee recommended an amalgamation of the curative and preventive medical services at all levels, viz., the State, the District, the sub-District (Secondary Centres) and the periphery (Primary Health Units). The Administrative Enquiry Committee appointed by the Government of Bombay also made similar recommendation and Government has accepted them in principle. Establishment of combined Medical and Public Health Units marks the nearest approach to the provision of Primary Health Units as recommended by the Bhore Committee. It is proposed to re-organise the present provision of combined Medical and Public Health Units so as to fall in line with the Bhore Committee recommendation and accordingly it is proposed to establish 150 Primary Health Units in eight districts other than Poona and Baroda. In addition the number of existing Units in Poona and Baroda Districts will be increased by 37 units so as to cover the entire districts. Thus in 1956-57 the two districts of Poona and Baroda will be fully served. In 1957-58 Sholapur and Surat Districts will be covered. In 1958-59 Kanara and Kolaba Districts, in 1959-60 Thana and Kaira Districts and in 1960-61 East Khandesh and West Khandesh Districts will be included. Each Unit will have a Medical Officer, nurse-*cum*-midwife or health visitor, midwife, sanitarian and some class IV employees. Each Unit will serve as an agency for rendering all preventive and curative medical services within its area.

Each Primary Health Unit will be in charge of a full-time Medical Officer. Since the existing combined Medical and Public Health Units are in charge of Subsidised Medical Practitioners it is proposed to continue them as Medical Officers under the new set-up and to pay them a small extra allowance in the shape of special pay at Rs. 30 per month per head plus permanent travelling allowance at Rs. 43-12-0 per month to compensate them for the additional duties involved in organising and supervising preventive measures. The Medical Officer will be assisted by a nurse-*cum*-midwife, a sanitarian and a midwife. For the purpose of the health visits to be undertaken by the staff the entire area in the jurisdiction of a Primary Health Unit consisting of about 20 villages will be divided into two circles one of which will be supervised by the nurse-*cum*-midwife and the other by the midwife. Each circle of 10 villages will thus be covered once a fortnight. The sanitarian's jurisdiction will be over the entire area of 20 villages which will all be covered by him in the course of one month. To start with, the work of supervising antimalaria measures will be taken over by the Primary Health Units. Gradually when the entire State is covered by the B.C.G. vaccination scheme the maintenance and follow up of that scheme will also be taken over by the Primary Health Units. The other functions of these Units will include maternity and child health services, maintenance and chlorination of drinking water supplies in villages, distribution of loans to village panchayats and other agencies for construction of village latrines, case findings in leprosy affected areas and training of village patels and other workers in preventive measures. A complete family record of births, deaths, incidence of sickness, etc., will be maintained by the staff of the Units during their health visits.

These Primary Health Units will serve on an average population ranging between 20,000 and 25,000 each. The programme of establishment of Primary Health Units in the State will be phased with an ultimate objective to spread a network of such units to serve a population of 5,000 to 6,000 per unit within the next fifteen years. During the Second Five-Year Plan period also the work will be phased and staff will be appointed by stages as shown below :—

1956-57—

Subsidised Medical Practitioners	27
Sanitary Sub-Inspectors	46
Nurse-*cum*-midwives	74
Woman Attendants	115

1957-58—

Subsidised Medical Practitioners	20
Sanitary Sub-Inspectors	15
Nurse-*cum*-midwives	50
Woman Attendants	25

1958-59—

Subsidised Medical Practitioners	*Nil.*
Sanitary Sub-Inspectors	*Nil.*
Nurse-*cum*-midwives	50
Woman Attendants	25

1959-60—	
Subsidised Medical Practitioners	13
Sanitary Sub-Inspectors	9
Nurse-*cum*-midwives	100
Woman Attendants	50
1960-61—	
Subsidised Medical Practitioners	5
Sanitary Sub-Inspectors	9
Nurse-*cum*-midwives	100
Woman Attendants	50
	783

The total cost on account of the staff required is worked out on the following basis :—

(1) Nurse-*cum*-midwives—Rs. 80—5—100, Average Rs. 95, Special pay Rs. 25 p. m., Messing Allowance Rs. 45 p. m., D. A. Rs. 17 p. m., (one-third of the admissible rate), P. T. A. Rs. 35, Uniform Allowance Rs. 75 per annum, Washing Allowance Rs. 3, H. R. A. Rs. 10 p. m.

(2) Sanitary Sub-Inspector—Rs. 75—5/2—100, P. T. A. Rs. 26-4-0, D. A. 45.

(3) Woman Attendants—Rs. 45 fixed, Clothing Allowance Rs. 20 per annum.

(4) Subsidised Medical Practitioners—Honorarium—Rs. 150, P. T. A. Rs. 43-12-0.

All Medical Officers including Subsidised Medical Practitioners—Special Pay Rs. 30 p. m. and P. T. A. Rs. 43-12-0 p. m.

The Units will be housed in rental buildings at Rs. 40 per month per unit. Contingencies for each Primary Health Unit are provided at Rs. 1,000 per annum per unit.

The total estimated cost of establishment of Primary Health Units in the State during the Second Five-Year Plan period is Rs. 60 lakhs which is of a recurring nature.

The financial assistance from the Centre is expected to be on the same lines as approved by the Government of India for health service in National Extension Service Blocks, i.e.

Staff, etc. (Recurrent)—	
1st six months	100 per cent.
2nd six months	66·2/3 per cent.
3rd six months	66·2/3 per cent.
4th six months	33·1/3 per cent.

The shares of the Central Government and the State Government will be accordingly Rs. 20,20,000 and Rs. 39,80,000.

SCHEME No. 304.

Name of the Scheme.—**Appointment of trained Pharmacists at the Government Hospitals and Dispensaries.**

Recurring	.. Rs. 1,50,000	Non-recurring	.. Rs.	*Nil.*
Total	.. Rs. 1,50,000	Ultimate annual recurring.	Rs. 40,000	

Remarks.—The Pharmacy Act of 1948 makes provisions for the regulation of the profession and practice of Pharmacy. In view of the provisions of this Act it will be necessary to employ qualified Pharmacists at all the Hospitals and Dispensaries in the Bombay State instead of the existing personnel of compounders. The Pharmacist will be a person passing Intermediate in Pharmacy (Diploma in Pharmacy). The present scale of pay of the Compounders is Rs. 55—130 and as it is, with this scale candidates are not coming forward for training and employment as compounders. It is, therefore, proposed that in order to secure gradual replacement of the existing compounders by trained Pharmacists, trained Pharmacists should be appointed on a Scale of Rs. 80—5—120—E.B.—8—200—E.B.—220 and at least 1/10 of those total number of Pharmacists should be on a selection scale of Rs. 160—10—300—E.B.—15—450 and they should be appointed at bigger Government hospitals. In all there are at present 400 compounders in the Government Hospitals and Dispensaries in the Bombay State. It is expected that all these will be replaced by trained Pharmacists during the course of the next twenty years. During the Second Five-Year Plan period it is proposed to replace existing 30 compounders by trained Pharmacists. The expenditure involved in the Scheme during period the plan period will be Rs. 1·50 lakhs which will be of a recurring nature.

SCHEME No. 305.

Name of the Scheme.—**Gradual conversion of Bombay Medical Service Class III posts into Bombay Medical Service Class II posts.**

Recurring	.. Rs. 5,28,000	Non-recurring	.. Rs.	*Nil.*
Total	.. ,, 5,28,000	Ultimate annual recurring.	,,	1,05,600

Remarks.—Medical Licentiates or persons holding equivalent qualifications are usually recruited to the Bombay Medical Service Class III. Admissions to the Medical Schools at Poona and Ahmedabad were stopped after 1945 consequent on the conversion of the Schools into Medical Colleges. The last admission to the licentiate course even in non-Government Medical Schools in this State was in October, 1948. This has resulted in acute shortage of Bombay Medical Service Class III Officers. In order to attract more candidates to join the Bombay Medical

Service Class III, Government revised the pay scale from Rs. 90—5—125—E.B.—6—155—E.B.—8—225 to Rs. 120—6—180—E.B.—8—260—E.B.—10—300 from 20th July, 1949. This did not attract a sufficient number of licentiates to join the Bombay Medical Service Class III. Response from Medical Graduates was negligible and the paucity of Bombay Medical Service Class III Officers continued. The merger of the various States in the State of Bombay aggravated the situation as many of the State dispensaries were in charge of unqualified Medical Officers or compounders and these persons were to be replaced by the Bombay Medical Service Class III Officers.

In order to speed up recruitment of candidates to the Bombay Medical Service Class III, Government decided in relaxation of recruitment rules to (*i*) recruit Medical Graduates on higher pay of Rs. 150 per mensem and (*ii*) recruit overage candidates upto the age of 40 years on a higher starting pay up to Rs. 156 per mensem. But these measures too have not solved the problem and the shortage of Bombay Medical Service Class III Officers continued. To meet the situation to some extent it has been decided to appoint persons holding the D. A. S. F. qualification to some minor dispensaries on the scale of pay of Rs. 80—5—100—E.B.—6—160—E.B.—8—240 and to convert some important Bombay Medical Service Class III Officers into Bombay Medical Service Class II charges. Accordingly it is proposed to include the scheme in the Second Five-Year Plan and to convert 20 Bombay Medical Service Class III posts into Bombay Medical Service Class II posts every year of the Second Five-Year Plan period. The total recurring expenditure on this account is Rs. 5.28 lakhs.

SCHEME No. 306.

Name of the Scheme.—**Provision of additional staff, equipment, alterations etc. to existing Medical Institutions.**

Recurring	...	Rs. 59,70,000	Non-recurring	...	Rs. 40,30,000
Total	...	,, 1,00,00,000	Ultimate annual recurring.	,,	18,00,000

Remarks.—There is a large number of institutions existing in the Medical Department and during the course of their maintenance, various proposals and suggestions for improvements, additions and alterations to buildings, replacement and additions of equipment, appointment of additional staff and other miscellaneous requirements for these institutions will crop up and will have to be carried out during the course of the Second Five-Year Plan period. It is necessary to include all this expenditure in the Second Five-Year Plan. It is not possible to frame any detailed estimates of requirements, on this account, but on the basis of the past

experience, it is estimated that expenditure on this account will be Rs. 1,00,00,000 during the Second Five-Year Plan period as follows :—

Non-recurring—

	Rs.
Building (additions and alterations and new buildings) and equipments.	**40,30,000**

Recurring—

	Rs.
Recurring expenditure on account of staff and contingent expenditure.	**59,70,000**

SCHEME No. 307.

Name of the Scheme.—**Grants to private hospitals and dispensaries.**

Recurring ... Rs. 24,00,000 Non-recurring ... Rs. *Nil.*

Total ... „ 24,00,000 Ultimate annual recurring. „ 4,80,000

Remarks.—In addition to the hospitals and dispensaries conducted by Government, there are private hospitals and dispensaries which provide medical facilities in the rural and urban areas of the State. In order to encourage the expansion of these private hospitals and dispensaries, a provision of Rs. 24 lakhs has been made in the Second Five-Year Plan for grant-in-aid to such institutions for providing new or greater facilities.

HEALTH

(WATER SUPPLY)

SCHEME No. 308.

Name of the Scheme.—**Government Water Supply Schemes.**

Recurring ... Rs. *Nil.* Non-recurring ... Rs. 1,74,00,000

Total ... „ 1,74,00,000 Ultimate annual recurring. „ *Nil.*

Remarks.—Of the 31 water supply schemes undertaken by Government, 20 works are expected to be completed by the end of the First Five-Year Plan period. For completion of the remaining 11 works an amount of Rs. 93,00,000 in round will be required. There are besides some small works which require to be completed during the Second Plan period at an estimated cost of Rs. 31 lakhs. An equivalent provision is, therefore, included in the Second Plan for completion of these schemes. The details of these schemes are given in Statement I below.

It is further proposed to undertake nine new schemes in Urban areas at an aggregate cost of Rs. 50 lakhs, *vide* Statement II below.

The total cost of this scheme thus comes to Rs. 1,74,00,000 during the Second Five-Year Plan period.

STATEMENT I

List of Government Water supply schemes under execution which are proposed to be completed during the Second Five-Year Plan period.

Name of the Scheme	Total cost of the scheme (including loans)	
	Estimated cost	Provision in the Second Five-Year Plan
1	2	3
	Rs. in lakhs	Rs. in lakhs
1. Neersagar Water Supply Scheme	198·80	9·0
2. Khadakwasla Scheme——Stage I	21·73	5·93
3. Poona Cantonment Water Works	3·28	1·37
4. Remodelling Kolhapur Distribution system ...	24·50	10·00
5. Improvements to Pandharpur Water Supply ...	10·00	10·00
6. Diversion of Sadar Bazar Nalla at Sholapur ...	2·47	2·00
7. Nasik Distillery Water Works	25·24	2·25
8. Improvements to Janjira Water Works	1·00	0·50
9. Ulhasnagar Distribution system	19·45	5·00
10. Godhra Water Supply	10·95	4·00
11. Water Supply Scheme for Kandivli, Borivli and Malad.	48·35	43·00
12. Other Works	......	31·00
Grand Total ...	365·77	124·05
	say	124·00

STATEMENT II

List of new Government Water Supply schemes to be undertaken in Urban Areas during the Second Five-Year Plan.

Name of the Scheme	Total cost of the scheme (including loans)	
	Estimated	Provision in 2nd Five-Year Plan
1	2	3
	Rs. in lakhs	Rs. in lakhs
1. Improvements to Poona Water Works ...	20·00	12·00
2. Water supply to Pimpri Town-ship ...	8·94	8·00
3. Mahabaleshwar Water Supply ...	9·28	9·28
4. Panchgani Water Supply ...	12·70	5·72
5. Improvements to Karad Water Works ...	5·00	5·00
6. Improvements to Distribution System at Badlapur (District Thana).	1·00	1·00
7. Masonry Weir across Bhogawati River ...	3·00	3·00
8. Improvements to Phaltan Water Supply—Stage II.	5·00	5·00
9. Minor Works ...	1·00	1·00
(*i*) Acquisition of land for the construction of staff quarters etc. at Bund Bridge Pumping Station, Poona.		
(*ii*) Additions and alterations to low service reservoir at Poona Cantonment Water Works.		
(*iii*) Small improvements to distributions systems at various water works.		
(*iv*) Provision of a submersible pump at Ichalkaranji water works.		
(*v*) Purchase of meter and meter parts for Salsette water works.		
(*vi*) Store shed at Barage Head Works, Badlapur.		
(*vii*) Provision of meters to standpost at Kurundwad.		
(*viii*) Spare parts of meters for distribution system at Badlapur.		
(*ix*) Provision of meters for Ichalkaranji Town.		
Grand Total ...	65·92	50·00

Scheme No. 309.

Name of the Scheme.—**Rural Water Supply.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 1,17,00,000
Total .. „ 1,17,00,000 Ultimate annual recurring .. „ *Nil.*

Remarks.—The villages in certain areas like Bhal Tract in Ahmedabad and Amreli Districts and Kharpat areas in the Kolaba District were suffering for want of safe drinking water supply for a long time. Under the National Water Supply and Sanitation Programme sponsored by the Government of India, the State Government has been given subsidy at the rate of 50 per cent. of the cost of the 7 schemes shown in the statement below. The total estimated cost of these schemes comes to Rs. 144 lakhs of which about Rs. 27 lakhs are expected to have been spent during the First Five-Year Plan period. The balance of Rs. 117 lakhs will be spent during the Second Five-Year Plan period. A provision of Rs. 117 lakhs is accordingly made in the Second Five-Year Plan for this Scheme. The Government of India's subsidy for the Scheme will be Rs. 58·50 lakhs.

STATEMENT

List of new Government Water Supply Schemes to be undertaken in Rural areas during the Second Five Year Plan

Name of the Scheme	Total cost of the Scheme (including loans)		Remarks
	Estimated Cost (Net)	Provision in the Second Five-Year Plan	
1	2	3	4
	(Rs. in lakh.)		
(1) Piped Water Supply Schemes in Kharpat area, Kolaba District, Tinvira Water Supply Scheme ..	10·71	6·71	
(2) Piped Water Supply Schemes in Kharpat area, Kolaba District, Shahapada Water Supply Scheme ..	33·00	29·00	
(3) Piped Water Supply Scheme for Bhal Tract in Ahmedabad District, Jhamp Piped Water Supply Scheme ..	17·59	12·44	
(4) Piped Water Supply Scheme for Bhal Tract in Ahmedabad District, Bhader Piped Water Supply Scheme ..	11·05	4·87	(4) Schemes at Serial Nos. 1, 3, 4, 5 and 6 started during 1955-56 under National Water Supply and Sanitation Programme.

Name of the Scheme	Total cost of the Scheme (including loans)		Remarks
	Estimated Cost (Net)	Provision in the Second Five-Year Plan	
1	2	3	4
	(Rs. in lakhs)		
(5) Piped Water Supply Scheme for Bhal Tract in Ahmedabad District, Sabarmati Piped Water Supply Scheme	59·35	53·68	
(6) Water Supply Scheme for six villages in Ratanpur Petha in Amreli District . ..	3·30	1·30	
(7) Water Supply to six villages in Bilgi Petha, District Bijapur	9·00	9·00	
Total ..	144·00	117·00	

SCHEME No. 310.

Name of the Scheme.—**Municipal and Village Panchayat Water Supply Schemes.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 3,46,00,000

Total .. „ 3,46,00,000 Ultimate annual recurring .. „ *Nil.*

Remarks.—At present Government gives grants ranging from 33⅓ per cent. to 50 per cent. of the cost of the Scheme to District and Borough Municipalities and Village Panchayat for water supply and drainage schemes in addition to the schemes directly undertaken by Government. It is expected that about 46 such schemes will be at different stages of completion at the end of the First Five-Year Plan period and it will be necessary to provide for their completion during the Second Five-Year Plan.

In addition, it is proposed to start work on 104 new schemes, 6 for Borough Municipalities, 18 for District Municipalities and 80 for Village Panchayat areas during the Second Five-Year Plan.

(i) *Water Supply and Drainage Schemes for Borough Municipalities.*

There are at present 50 schemes under execution out of which 28 will have been completed by the end of the First Five-Year Plan period and the remaining 22 schemes will be completed during the Second Five-Year Plan period and this will cost Rs. 326·76 lakhs. It is also proposed to take up six new schemes the estimated cost of which will be Rs. 53·62 lakhs.

(ii) *Water Supply and Drainage Schemes for District Municipalities.*

There are at present 38 schemes under execution and of these 23 schemes will have been completed by the end of the First Five-Year Plan. The remaining 15 schemes will be completed during the Second Five-Year Plan period. The cost of works to be completed will be Rs. 88·81 lakhs and the estimated cost of new works to be started will be Rs. 274·28 lakhs.

(iii) *Water Supply and Drainage Schemes for Village Panchayat areas.*

Out of 27 schemes which were undertaken 18 works will have been completed by the end of the First Five-Year Plan period. The remaining 9 schemes are proposed to be completed during the Second Plan period at a cost of Rs. 13·15 lakhs.

The total cost of works to be completed and the total estimated cost of new works to be started is given below :—

	Number of works to be continued during 2nd Plan period	Number of new works	Amount required to complete works in progress	Estimated cost of new schemes	Total.
			Rs. (in lakhs)	Rs. (in lakhs)	Rs. (in lakhs)
Borough Municipalities ..	22	6	326·76	53·62	380·38
District Municipalities ..	15	18	88·81	274·28	303·09
Village Panchayats ..	9	80	13·15	68·00	81·15
Total ..	46	104	428·72	395·90	824·62

An *ad hoc* provision of Rs. 264 lakhs is made for the works in progress and Rs. 82 lakhs for the new works to be started during the Second Five-Year Plan period. It is expected that Central assistance to the tune of Rs. 240 lakhs will be forthcoming for this Scheme. Some of the new works will remain in progress at the end of the Second Plan period.

SCHEME No. 311.

Name of the Scheme.—**Khadakwasla Water Supply Scheme.**

Recurring .. Rs. *Nil.* Non-recurring .. Rs. 1,50,00,000

Total .. „ 1,50,00,000 Ultimate annual recurring .. „ *Nil.*

Remarks.—The present source of water supply to Greater Poona is derived from Lake Fife from where water is conveyed to the city by means of a canal. The quality of water supplied to the city is far from satisfactory as it is supplied without being filtered. It is, therefore, proposed to convey water by means of a pipe line from Lake Fife to Poona City. It is also proposed to install settling tanks at Khadakwasla. Water will be filtered at Parvati Hills and will be supplied to the town through a service reservoir. The work will be carried out through Government agency. Since water will also be supplied to the Government Water Works in Cantonment areas, part cost will be borne by Government.

The estimated cost of the scheme comes to Rs. 175 lakhs. Of this the Poona Municipal Corporation is expected to raise Rs. 25 lakhs and the balance of Rs. 150 lakhs will be provided by Government. A provision of Rs. 150 lakhs has accordingly been made in the Second Five-Year Plan for this Scheme.

SCHEME No. 312.

Name of the Scheme.—**Rakaskop Project for Water Supply to Belgaum.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	1,00,00,000
Total	.. ,,	1,00,00,000	Ultimate annual recurring	.. ,,	Nil.

Remarks.—This scheme envisages construction of a storage of an earthen dam on the Markandeya River with a storage of about 3000 m.c. ft. for supply of water to Belgaum and lift irrigation.

The scheme which is estimated to cost about Rs. 100 lakhs when completed will supply water to a prospective population of 3 lakhs of Belgaum, Shahapur, Belgaum Cantonment, Anagol, Vadgaon and probable development areas nearabout Belgaum. A provision of Rs. 1,00,00,000 is accordingly proposed for this Scheme in the Second Five-Year Plan.

SCHEME No. 313.

Name of the Scheme.—**Vaitarna-cum-Tansa Scheme.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	2,50,00,000
Total	.. ,,	2,50,00,000	Ultimate annual recurring	.. ,,	Nil.

Remarks.—The Vaitarna-*cum*-Tansa Scheme is being executed by the Bombay Municipal Corporation with the assistance of loan sanctioned by the Government of India. During the period of the First Five-Year Plan, the Government of India have sanctioned to the Bombay Municipal Corporation through this Government a loan of Rs. 400 lakhs for this scheme. The work on the project is in progress and during the period of the Second Five-Year Plan following works are contemplated :—

(*a*) The work on the spillway gates of the Vaitarna Dam.

(*b*) Laying 120″ dia. pipeline between Bel Nalla and Tansa and the remaining length of 96″ dia. pipeline between Tansa and Bombay.

In addition to the completion of the main Vaitarna-Tansa Project, large works for remodelling and rationalising the distribution system in the City will also have to be undertaken. The estimated expenditure for completion of the main project comes to Rs. 418 lakhs. An *ad hoc* provision of Rs. 250 lakhs is made under the Second Five-Year Plan on account of loan to be advanced to the Bombay Municipal Corporation. The entire amount of the loan is expected to be received from the Government of India.

SCHEME No. 314.

Name of the Scheme.—**Village Water Supply.**

Recurring	.. Rs. Nil.	Non-recurring	.. Rs. 1,20,00,000
Total	.. „ 1,20,00,000	Ultimate annual recurring	.. „ Nil.

Remarks.—A number of villages in the Bombay State suffer from scarcity of drinking water. In order to relieve the hardships of the villages, the Government had declared its policy to provide every village in the State having a population of 200 and over with at least one well. In the case of villages in backward areas, water supply facilities are to be provided in the villages with a population of 100 and over. The scheme covers construction of new wells and tanks and repairs to old ones.

During the period of the First Five Year Plan, Government spent nearly 40 lakhs annually on the village water supply schemes. Similar works are also undertaken under the Community Development Projects and National Extension Service Programmes for which an overall provision of Rs. 24 crores has been made in the Second Five Year Plan of the State. For some years during the Second Plan period certain areas will, however, remain uncovered either by National Extension Service or by Community Development Projects. Similarly, under the Community Development Projects, National Extension Service and Local Development Works Programmes, village water supply works are undertaken only if popular contribution at prescribed rates is forthcoming. There are certain villages which have yet to be provided with at least one drinking water well. A provision of Rs. 1·20 crores is, therefore, made in the Second Five Year Plan for (i) completion of the works in progress and (ii) for undertaking new works in the areas which may be covered by the Community Development Projects and National Extension Service Programmes in late years. Only villages which have not yet been provided with at least one well according to the existing policy of Government will be covered.

HEALTH

(DRAINAGE AND SANITATION)

SCHEME No. 315.

Name of the Scheme.—**Subsidising construction of modern Sanitary Conveniences.**

Recurring	.. Rs. Nil.	Non-recurring	.. Rs. 4,00,000
Total	.. „ 4,00,000	Ultimate annual recurring	.. „ Nil.

Remarks.—The Committee appointed for inquiry with the living conditions of scavangers laid great stress for provision of modern type latrines. In order to give an incentive to the local bodies for provision of sanitary conveniences it is proposed to give grants to local bodies at the rates mentioned below during the period of the Second Plan, *viz* :—

	Rates of Grants
(1) Borough Municipalities ..	20 per cent. of the cost.
(2) District Municipalities ..	25 per cent. of the cost.
(3) District Local Boards ..	25 per cent. of the cost.
(4) Village Panchayats ..	30 per cent. of the cost.

It is accordingly proposed to provide under the Second Five Year Plan an amount of Rs. 4 lakhs on account of grant-in-aid to local bodies to enable them to construct latrines.

SCHEME No. 316.

Name of the Scheme.—**Grant of loans for construction of slaughter houses.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	5,00,000
Total	.. "	5,00,000	Ultimate annual recurring	.. "	Nil.

Remarks.—In pursuance of the recommendation of the Committee appointed by Government to enquire into the conditions of slaughter houses in towns and villages it is proposed to give an incentive to local bodies for construction and improvements of slaughter houses by giving a loan to cover part of the cost of a slaughter house. It is accordingly proposed to provide under the Second Five-Year Plan an amount of Rs. 5,00,000 on account of loans to local bodies for construction of new slaughter houses and for improvements to existing ones costing about Rs. 23 lakhs as shown below :—

	Total cost of construction or improvements	Share of local body	Cost of State Government
	Rs.	Rs.	Rs.
(1) Borough Municipalities	15,00,000	12,00,000	3,00,000
(2) District Municipalities	4,00,000	3,00,000	1,00,000
(3) Rural areas	4,00,000	3,00,000	1,00,000
Total ..	23,00,000	18,00,000	5,00,000

HEALTH

(CONTROL OF DISEASES)

SCHEME No. 317.

Name of the Scheme.—**Control of T. B. by use of mass miniature Radiography etc.**

Recurring	.. Rs.	2,74,500	Non-recurring	.. Rs.	71,800
Total	.. "	3,46,300	Ultimate annual recurring	.. "	54,900

Remarks.—The importance of early detection of cases suffering from tuberculosis can hardly be overemphasised. It serves various purposes. In the first instance it gives a clear idea of the position of the morbidity of the disease and other lung affections which are liable to be considered as tuberculosis. Secondly it helps the persons to take recourses to early treatment which proves of extreme benefit to themselves so as to recover health as quickly as possible. The disease will be detected early and such cases will be prevented from getting to advanced open cases thereby stopping the spread of infection. It is the most effective and superior method of early detection of tuberculosis. By this instrument the entire population of the State can be X-rayed and the diseased persons can be sorted out and dealt with immediately at a very low cost. It is an important and perhaps the only method of prevention which is known to science at present.

There are at present two stationary units in the State, one in Bombay City and the other at Ahmedabad and they are controlled by private agencies, *viz.*, Anti-Tuberculosis Association, Bombay, and Sarvodaya Tuberculosis Clinic, Ahmedabad, but being stationary they can be useful to only to a limited number of persons.

It is necessary to have one unit (similar to those run by private associations) under Government control. The non-recurring cost proposed will be required for purchase of equipment only.

SCHEME No. 318.

Name of the Scheme.—**Control of Tuberculosis.**

Recurring ..	Rs.	16,00,000	Non-recurring ..	Rs.	24,00,000
Total ..	„	40,00,000	Ultimate annual recurring ..	„	3,20,000

Remarks.—There is a great need for provision of additional beds for Tuberculosis patients. Sufficient facilities do not exist at present for the treatment of Tuberculosis patients in the Districts and rural areas. Facilities for the survey, training and demonstration centres for domiciliary service are also not available. In order to increase these facilities, it is proposed to provide additional accommodation for about 175 patients by expanding the Tuberculosis Hospital at Aundh. It is also proposed to establish one or two Tuberculosis clinics at the District Head Quarter Hospitals where such Clinic is not provided at present. It is further proposed to start one Centre for survey, training, demonstrations and treatment and domiciliary service. The total expenditure on account of this scheme is Rs.40 lakhs out of which Rs. 16 lakhs is recurring and Rs. 24 lakhs non-recurring.

SCHEME No. 319.

Name of the Scheme.—**Continuance of B. C. G. Vaccination Scheme.**

Recurring ..	Rs.	20,00,000	Non-recurring ..	Rs.	Nil.
Total ..	„	20,00,000	Ultimate annual recurring ..	„	4,00,000

Remarks.—There are 15 technician teams sanctioned for the introduction of mass B. C. G. Vaccination campaign in the State of Bombay. These teams with all facilities will be able to tackle the entire population of 3,59,44,000 of the Bombay State within a period of 5 to 7 years. These teams will work in Central, Northern and Southern Divisions of the State. A team will be working in each of these divisions village to village, taluka to taluka, district wise. To start with Nasik, Kaira and Dharwar districts will be taken up and the scheme will be gradually extended so that by the end of 1957-58, the campaign will be introduced in all the districts of the State. The total cost of the scheme is Rs. 20 lakhs which is of a recurring nature.

SCHEME No. 320.

Name of the Scheme.—**Establishment of Leprosy Control Centres.**

Recurring ..	Rs.	21,70,000	Non-recurring ..	Rs.	2,30,000
Total ..	„	24,00,000	Ultimate annual recurring ..	„	7,44,000

Remarks.—From the rough survey and statistics available it is found that there are nearly 90,000 leprosy patients in the State of Bombay. Whereas the accommodation available for them at present is for 2,200 patients only, which is quite inadequate. A scheme for providing additional accommodation has been formulated separately. However sufficient accommodation will not be available for all the patients. It is, therefore, proposed to establish 10 Leprosy Control Centres in the endemic areas where treatment could be given in the very early stage of the disease in order to avoid its spread and reduce demand on additional Hospital accommodation. One Subsidiary Leprosy Centre costs about Rs. 23,000 (non-recurring).

SCHEME No. 321.

Name of the Scheme.—**Anti-Malaria Scheme.**

Recurring ..	Rs.	1,18,00,000	Non-recurring ..	Rs.	1,02,00,000
Total ..	„	2,20,00,000	Ultimate annual recurring ..	„	*Nil.*

Remarks.—A nucleus permanent Malaria Organisation was created in this State in 1942 with an annual budget of Rs. 50,000 and its work was confined to Kanara District in the first instance. After some years of investigation a large scale rural malaria control project was initiated in 1946 in Dharwar and Kanara Districts. Special survey squads were appointed which carried out a detailed malaria survey in every district of the State; control measures were steadily extended to about ten districts, and in 1953, as part of the National Malaria Control Programme malaria control service was extended throughout the State. The total malaria budget is now, a little over 70 lakhs of rupees out of which the share of the Government of Bombay is 30 lakhs of rupees and the balance is met from the Indo-American Aid programme in the shape of free supplies, insecticides, transport vehicles and spraying equipment. The entire State has been divided into 19 units each unit catering to a million population and staffed with a Medical Officer (in some units the Medical Officer of Health or the District Health Officer is placed in charge), an Assistant Medical Officer, 4 Malaria Supervisors and 4 Malaria Inspectors (in some Units there are only 3), 4 Insect Collectors, 4 trucks, 4 drivers, 4 cleaners and 3 clerks. In the non-Malaria season this staff is utilised for the advancement of general health. In the two districts of Kanara and Dharwar, Malaria Control service has been integrated with general Public Health service. At head-quarters, the staff consists of an Assistant Director of Public Health, a senior Entomologist, a Junior Entomologist, 2 Medical Officers, 4 Assistant Medical Officers, 2 Research Assistants, 2 Malaria Assistants, an Engineering Supervisor, 12 Insect Collectors, a Superintendent, a Senior Accountant, 3 Inspecting Accountants, a Stenographer, 3 Junior Clerks and 11 Class IV employees.

During the Second Five-Year Plan period every effort will be made to consolidate the work already carried out and to maintain the programme so that the human reservoirs of infection are brought to the lowest level.

It has been assumed that all those malaria control units which were installed as part of the National Malaria Control Programme in the First Five-Year Plan would continue to receive Central assistance during the entire Second Five-Year Plan period in the shape of free supply of insecticides to the extent required during the maintenance phase. It is estimated that the net expenditure to the State Government for this Scheme will be Rs. 25 lakhs in the first three years, Rs. 23 lakhs in the fourth year and Rs. 20 lakhs in the 5th year.

The total estimated cost of the Scheme will be :—

Recurring cost to State for five years ..	Rs.	1,18,00,000
Central aid by way of D. D. T., etc..	,,	1,02,00,000
Total ..		2,20,00,000

SCHEME No. 322.

Name of the Scheme.—**Control of Filariasis.**

Recurring ..	Rs.	*Nil.*	Non-recurring ..	Rs.	3,00,000
Total ..	,,	3,00,000	Ultimate annual recurring ..	,,	*Nil.*

Remarks.—It is proposed to establish one control unit in the State of Bombay with assistance from the Government of India either by way of waiving customs duty on Hetrazan tablets, or by way of grant-in-aid equal to customs duty. The Surat Municipality which is concerned with the unit will be in a position to participate in the National Filariasis Control Programme. Assistance from the Centre under the Second Five-Year Plan will be about Rs. 3,00,000. Liability to the State Government will therefore be nil.

SCHEME No. 323.

Name of the Scheme.—**Plague Organisation.**

Recurring ..	Rs.	1,79,000	Non-recurring ..	Rs.	*Nil.*
Total ..	,,	1,79,000	Ultimate annual recurring ..	,,	36,000

Remarks.—A Plague Organisation has been established since 1947. The main object of the Scheme is to deal with the plague endemic areas in the State and to carry out research work in the field for the prevention and control of Plague by different methods. During the last 3-4 years the State is completely free from plague. The virtual elimination of plague in the State is to a great extent due to the DDT spraying service adopted in the State for Malaria Control purposes. The Plague Organisation has carried out investigations on the problems of recrudescence of plague in endemic areas and the most efficacious methods of control of the disease with the application of residual insecticides. This organisation has been continued with reduced staff for a period of 3 years from 1st April 1955.

HEALTH

(LABORATORY SERVICES)

SCHEME No. 324.

Name of the Scheme.—**Establishment of Health Laboratories (Medical and Public Health combined) at District Head Quarter Hospitals.**

Recurring ..	Rs. 50,000	Non-recurring ..	Rs. 1,50,000
Total ..	„ 2,00,000	Ultimate annual recurring ..	„ 50,000

Remarks.—At present proper facilities do not exist for medical and public health laboratory work in the Districts. During Second Plan period it is, therefore, proposed to establish one or two combined laboratories which will serve the needs of the medical department for diagnostic purposes as well as the needs of the Public Health Department for examination of water, food and other samples and also for diagnosis of communicable diseases at the District Head Quarter Hospitals as may be feasible within the funds available. This laboratory will be under the unitary control of the Civil Surgeon or the District Health Officer of the District. The cost of the scheme is estimated at Rs. 2 lakhs out of which an amount of Rs. 50,000 is recurring and Rs. 1·5 lakhs is non-recurring (Rs. 1 lakhf or building and Rs. 50,000 for equipment).

HEALTH

(MEDICAL EDUCATION AND TRAINING)

SCHEME No. 325.

Name of the Scheme.—**Establishment of Medical College and Hospital at Hubli.**

Recurring ..	Rs. *Nil.*	Non-recurring ..	Rs. 50,00,000
Total ..	„ 50,00,000	Ultimate annual recurring ..	„ 9,00,000

Remarks.—In order to provide additional facilities for the training and out-put of Doctors and in view of the demand for such facilities from the people of Karnatak, it is proposed to establish a Medical College and Hospital at Hubli. As a first step towards implementation of the scheme, land for the construction of the College and Hospital Buildings has been already acquired at a cost of about Rs. 9,00,000. It is proposed to establish a Medical College (with about 50-60 annual admissions) and a Hospital with 350-400 beds attached to it. The College will train students for the degree of M.B.B.S. and post-graduate courses. Under the Second Five-Year Plan a provision of Rs. 50 lakhs has been made for construction of some of the buildings. Provision for the remaining buildings and equipment, etc. for the College and Hospital will be postponed till after the expiry of the Second Five-Year Plan period.

SCHEME No. 326.

Name of the Scheme.—**Conversion of Honorary posts of Doctors and Teachers in Government Colleges and Hospitals attached thereto into full-time posts of Doctors and Teachers.**

Recurring ..	Rs. 10,00,000	Non-recurring ..	Rs. *Nil.*
Total ..	„ 10,00,000	Ultimate annual recurring ..	„ 3,00,000

Remarks.—In order to improve the standard of treatment of patients and teaching at the Government Medical Colleges, at Bombay, Poona, Ahmedabad and Baroda, it is proposed to convert the Honorary posts of Doctors into full-time posts during the Second Five-Year Plan, in respect of the posts where suitable incumbents to fill the Honorary appointments are not available and for other posts. A provision of Rs. 10 lakhs has been made for this purpose in the Second Plan.

SCHEME No. 327.

Name of the Scheme.—**Starting of Refresher courses in certain specialities such as (i) T. B., (ii) Leprosy, (iii) Eye, (iv) Anæsthesia for all Bombay Medical Service Class III and Class II Officers by rotation.**

Recurring	.. Rs.	44,000	Non-recurring	.. Rs.	*Nil.*
Total	.. ,,	44,000	Ultimate annual recurring	.. ,,	8,700

Remarks.—At present the Bombay Medical Service Class II and Class III Officers are not sufficiently trained in the treatment of diseases on modern lines. In order to provide facilities for such training, it is proposed to hold refresher courses of three weeks' duration each year during the Summer and October Vacations at the Medical Colleges which will cover the four subjects, *viz.*, (i) T. B., (ii) Leprosy, (iii) Eye, (iv) Anæsthesia. About 30 doctors are proposed to be trained in each course. A provision of Rs. 44,000 has been included in the Plan for this purpose.

SCHEME No. 328.

Name of the Scheme.—**Facilities for imparting post-examination training for medical students after passing the final M.B.B.S. Examination.**

Recurring	.. Rs.	9,40,000	Non-recurring	.. Rs.	20,00,000
Total	.. ,,	29,40,000	Ultimate annual recurring	.. ,,	2,88,000

Remarks.—According to the revised M.B.B.S. Course of the various Universities in the State, a post-examination training of one year (including 3 months in Public Health in Rural Areas) has been prescribed for all the Medical students after passing their final M.B.B.S. examination. This training is proposd to be given to the Medical students at the mofussil hospitals and dispensaries. It is proposed to provide them during the period of their training, with free lodging and boarding or to pay them allowance of Rs. 50 per mensem for each student in lieu of free boarding. For this purpose it will be necessary to construct residential accommodation for the interned students at the various Hospitals where they will be sent for training. All other expenses such as travelling allowances etc. will have to be borne by the students themselves. Extra expenditure will be Rs. 2,88,000 per annum. During the Second Five-Year Plan period the expenditure will be Rs. 9,40,000 recurring and Rs. 20,00,000 non-recurring on account of construction of residential accommodation.

SCHEME No. 329.

Name of the Scheme.—**Establishment of a College of Nursing for higher and post-graduate education in Nursing B.Sc. (Hons.).**

Recurring	.. Rs.	1,80,000	Non-recurring	.. Rs.	20,000
Total	.. ,,	2,00,000	Ultimate annual recurring	.. ,,	45,000

Remarks.—There is a need in the field of nursing for highly qualified nurses possessing University degree. At present the degree of B.Sc. (Hons.) in Nursing is provided in the Delhi and Madras States. No such facilities are available in the Bombay State although urgently needed. Candidates are at present being sent to the College of Nursing, New Delhi for the B.Sc. (Hons.) course in Nursing. In addition to providing training facilities to Nurses it is necessary to have a College so as to train the teachers. It is, therefore, proposed to start a College of Nursing in the Bombay State which would train the students for a University degree of B.Sc. (Hons.) in Nursing. Admission to the College will be for about 25 students annually. The course will be for four years. It is also proposed to provide facilities in the College for post-graduate training in Nursing, *viz.*, Teaching, Administration and Public Health Nursing. The total cost of the scheme during the Plan period will be Rs. 2,00,000 out of which Rs. 20,000 will be non-recurring and Rs. 1,80,000 will be recurring and the ultimate annual recurring cost will be Rs. 45,000. The cost of the scheme is being kept low by utilizing the facilities already available at one of the Medical Colleges.

SCHEME No. 330.

Name of the Scheme.—**Training and employment of additional X-Ray and Laboratory Technicians.**

Recurring	.. Rs.	85,000	Non-recurring	.. Rs.	15,000
Total	.. „	1,00,000	Ultimate annual recurring	.. „	35,000

Remarks.—During the First-Five Year Plan period about 44 technicians have been trained (37 Laboratory technicians and 7 X-Ray technicians). It is proposed to train about 24 additional technicians during the Second Five-Year Plan period (12 Laboratory technicians and 12 X-Ray technicians). The position regarding the availability of X-Ray and Laboratory trained personnel is such that unless training facilities and employment go hand in hand it may not be possible to attract a sufficient number of persons. Such number of technicians as will be required for Government Institutions will be employed by Government and the rest will be available for employment at non-Government Institutions in the Bombay State. The technicians while under training will be paid a stipend of Rs. 50 per mensem and after completion of their training will be given a scale of Rs. 100—8—140—10—200 if appointed under this scheme. A total provision of Rs. 1 lakh (recurring Rs. 85,000 and non-recurring Rs. 15,000) has been included in the Second Plan for this scheme.

SCHEME No. 331.

Name of the Scheme.—**Appointment and Training of Additional Nurses, Midwives and Health Visitors.**

Recurring	.. Rs.	4,80,000	Non-recurring	.. Rs.	20,000
Total	.. „	5,00,000	Ultimate annual recurring	.. „	1,20,000

Remarks.—In view of the urgent need to provide additional Nurses and Midwives and also to increase the out-put of trained Nurses and Midwives, it is proposed to provide additional training facilities for about 60 Nurses and Midwives and to make appointment of necessary additional trained staff for this purpose. A total provision of Rs. 5 lakhs (Rs. 4·8 lakhs recurring and Rs. 20,000 non-recurring) has been included in the Plan for this scheme.

SCHEME No. 332.

Name of the Scheme.—**Upgrading of Departments in Medical Colleges and attached Hospitals and for Medical Research.**

Recurring	..	Rs.	3,00,000	Non-recurring	.. Rs.	2,00,000
Total	..	„	5,00,000	Ultimate annual recurring	.. „	50,000

Remarks.—Certain Departments in the Government Medical Colleges at Bombay, Poona, Ahmedabad and Baroda, and their attached Hospitals, require strengthening so as to bring them up to the standard necessary for training of under-graduate and post-graduate students. It is, therefore, proposed to improve and bring such departments to the standard required by providing additional equipment and augmenting the staff and other expenditure where necessary. The upgrading of the Departments will also give impetus to research work being done in the various Departments. The expenditure involved in the scheme during the Second Five-Year Plan period is estimated at about Rs. 5 lakhs of which Rs. 3 lakhs would be recurring and Rs. 2 lakhs would be non-recurring.

Out of the total expenditure of Rs. 5 lakhs, it is expected that a Central grant of about Rs. 2·5 lakhs will be forthcoming towards this scheme.

SCHEME No. 333.

Name of the Scheme.—**Institution of a course of Intermediate in Pharmacy leading to Diploma in Pharmacy and starting of Training Institution for the course in Bombay State.**

Recurring	..	Rs.	*Nil.*	Non-recurring	.. Rs.	3,00,000
Total	..	„	3,00,000	Ultimate annual recurring	.. „	*Nil.*

Remarks.—The Pharmacy Act of 1948 provides for regulation of the profession and practice of Pharmacy. It is, therefore, necessary to improve the Pharmaceutical services in the State to meet the requirements of the Act. Adequate facilities for the education of Pharmacists do not, however, exist in this State. At present there is only one College of Pharmacy at Ahmedabad and that trains candidates for a degree course in Pharmacy and for Intermediate in Pharmacy (Diploma in Pharmacy). Considering, however, the number of Pharmacists required for the profession it is absolutely necessary to expand the facilities for training students for Intermediate in Pharmacy leading to the Diploma in Pharmacy. It is, therefore, proposed to start one such institution in Bombay State under the Second Five-Year Plan. About 40 students will be admitted annually at this institution. The course will be of two years after the Secondary School Certificate. The proposed course will be started by the Bombay State branch of the Indian Pharmaceutical Association which has agreed to set up a College of Pharmacy in Bombay. The Association will be given grants for meeting the expenditure on the scheme.

SCHEME No. 334.

Name of the Scheme.—**Completion of buildings of the Medical Colleges and Hospitals at Poona and Ahmedabad.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	50,00,000
Total	.. „	50,00,000	Ultimate annual re-curring	.. „	*Nil.*

Remarks.—The Scheme for the establishment of the Medical Colleges at Poona and Ahmedabad including the construction of a new Hospital and College Buildings was sanctioned in the First Five-Year Plan. The main buildings of the Hospital and Colleges have already been completed and the Colleges have been started. There is, however, a certain number of subsidiary buildings such as students' hostels, quarters for staff, etc., still to be completed and that will have to be done during the period of the Second Five-Year Plan for the completion of the whole Scheme. The cost of the remaining buildings is estimated at about Rs. 50 lakhs, which amount has been provided for in the Second Five-Year Plan.

SCHEME No. 335.

Name of the Scheme.—**Training of personnel in Public Health.**

Recurring	.. Rs.	50,000	Non-recurring	.. Rs.	*Nil.*
Total	.. „	50,000	Ultimate annual re-curring	.. „	*Nil.*

Remarks.—The scheme envisages provision of post-graduate training facilities in Public Health for Medical Officers of Primary Health Units and for Divisional Medical Officers of Health and District Health Officers and functional heads of bureaus at the Public Health Institute in Hospital administration. It is also proposed to provide training facilities in special fields like tuberculosis, leprosy, nutrition, malaria etc. to nurses in Public Health practice and sanitarians in simple rural medical relief. In addition, training facilities are proposed to be given to Sanitary Inspectors.

The total cost of this scheme during the Second Five-Year Plan works out to Rs. 50,000.

SCHEME No. 336.

Name of the Scheme.—**Expansion of activities for Health Education.**

Recurring	.. Rs.	*Nil.*	Non-recurring	.. Rs.	2,00,000
Total	.. „	2,00,000	Ultimate annual re-curring	.. „	*Nil.*

Remarks.—Magic lantern slides are being utilised at present for health education. While these have been somewhat popular in schools the general public are not very much attracted by magic lantern demonstrations. A film strip has the advantage that while it gives the villagers an impression of its being a silent motion picture it does not move so fast that the villagers fail to grasp it. The magic lantern equipment also is very cumbersome and heavy to carry. A real difficulty in the conversion of magic lantern demonstrations into film strips lies in the financial cost involved. In the Second Plan period it is proposed to have about 187 Primary Health Units. At least 40 units of film strips projectors and film strips on various health subjects are proposed to be prepared and supplied each year to these units during the Second Five-Year Plan period. The total cost would be approximately Rs. 2,00,000 during five years or Rs. 40,000 per year. Each sanitarian need not have all the film strips on all subjects. These could go in rotation but the projectors must be made available in each unit. It is expected that for the non-recurrent item of expenditure assistance may be made available by the United Nations International Children's Emergency Fund. With the proposed expansion the impact of health education on general public will be very great and practically every village will have demonstrations about two or three times a year.

HEALTH

(SYSTEMS OTHER THAN MODERN MEDICINES)

SCHEME No. 337.

Name of the Scheme.—**Research in Ayurved.**

Recurring	.. Rs.	1,00,000	Non-recurring	.. Rs.	50,000
Total	.. „	1,50,000	Ultimate annual recurring	.. „	50,000

Remarks.—During the Second Five Year Plan, period it is proposed to start pharmacological research through experiments on animals at the Haffkine Institute, Bombay. The proposed research in Ayurved includes preparation of text books and dictionary, standardisation of drugs in Pharmacy, collection of data from dispensaries and in District Hospitals where Ayurvedic beds may be existing. A total provision of Rs. 1,50,000 has been included in the Plan for this purpose of which Rs. 1 lakh will be recurring and Rs. 50,000 non-recurring expenditure.

SCHEME No. 338.

Name of the Scheme.—**Pharmacy Storage of Ayurvedic Herbs.**

Recurring	.. Rs.	40,000	Non-recurring	.. Rs.	10,000
Total	.. „	50,000	Ultimate annual recurring	.. „	15,000

Remarks.—In order to give encouragement to Ayurved and indigenous drugs, it is in the first instance proposed to take a survey of indigenous herbs and shrubs, collect them, store them and sell them to the public, private pharmacies, and private practitioners for preparing Ayurvedic medicines. There will be a committee to supervise the storage work and it will suggest ways and means :—

(i) to cultivate and encourage the growth of these herbs and drugs,

(ii) to encourage collection, storage and preservation of herbs, and

(iii) to supply and sell the above herbs to the public and the profession.

A total provision of Rs. 50,000 has been included in the Plan for this purpose of which Rs. 40,000 will be recurring and Rs. 10,000 non-recurring expenditure.

SCHEME No. 339.

Name of the Scheme.—**Starting an Ayurvedic Museum.**

Recurring	.. Rs.	30,000	Non-recurring	.. Rs.	70,000
Total	.. „	1,00,000	Ultimate annual recurring	.. „	20,000

Remarks.—It is proposed to start an Ayurvedic Museum for the study of Ayurveda during the Second Five-Year Plan, as it is essential to maintain one such Museum. It is proposed to constitute a Committee consisting of eminent Vaidyas to supervise the work of the Museum and check the use of spurious herbs and drugs and to encourage genuine drugs. A provision of Rs. 1 lakh has been included in the Plan for setting up the Museum.

SCHEME No. 340.

Name of the Scheme.—**Preparation of Books and Reference Books on Ayurveda.**

Recurring	.. Rs.	1,00,000	Non-recurring	.. Rs.	50,000
Total	.. „	1,50,000	Ultimate annual recurring	„	30,000

Remarks.—At present there are no text-books available for the study of Ayurveda. It is, therefore, proposed to prepare text-books on each subject of Ayurveda.

In addition to the text-books, one Ayurvedic Dictionary is essentially required to be prepared and it can be prepared simultaneously with the books. Besides, books in regional languages on the subject " How to maintain the health of children according to the Ayurvedic principles " is proposed to be prepared.

A total provision of Rs. 1,50,000 has been included in the Plan for this scheme of which Rs. 1 lakh will be recurring and Rs. 50,000 will be non-recurring expenditure.

SCHEME No. 341.

Name of the Scheme.—**Additional grants to Ayurvedic Teaching Institutions.**

Recurring	.. Rs.	2,00,000	Non-recurring	.. Rs.	3,00,000
Total	.. „	5,00,000	Ultimate annual recurring	„	50,000

Remarks.—In order to encourage and also to bring the existing Teaching Istitutions in Ayurved upto the standard laid down by the University and the Ayurvedic Faculties, it is necessary to upgrade the various Departments of the Teaching Institutions in Ayurved in the State of Bombay. The necessity has become urgent on account of institution of a Degree Course in Ayurved. The financial condition of these institutions is such that they are not able to meet the demand for additional funds for this purpose. It is, therefore, proposed to give additional grants to these institutions. The expenditure involved in the scheme during the Second Five-Year Plan period is Rs. 5 lakhs out of which Rs. 2 lakhs is recurring and Rs. 3 lakhs is non-recurring.

HEALTH

(MISCELLANEOUS)

SCHEME No. 342.

Name of the Scheme.—**Reorganisation of the Directorate of Public Health.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	4,00,000
Total cost	.. „	4,00,000	Ultimate annual recurring	„	Nil.

Remarks.—A Public Health Institute at the State level is the pivot of Health administration including in its functions organisation, research, training, survey, appraisal and planning. In pursuance of the recommendation of the Administrative Enquiry Committee regarding setting up of such an Institute to provide primarily for the training of officers at all levels in Public Health practice steps are already being taken for acquiring a building or constructing a new one for housing such an Institute. It is now proposed to establish such an Institute during the Second Five-Year Plan period. The Director of Public Health will function as the Director of the Public Health Institute. Several functional bureau will be attached to this Institute, viz., epidemiology and vital statistics, malaria and other insect borne diseases, maternity and child health, nutrition, health education, veneral diseases, school health services, tuberculosis, leprosy, public health training and administration, rural sanitation, public health laboratory service and small-pox including preparation of vaccine lymph. At present there are three functional Assistant Directors in the Public Health Department for malaria, public health laboratory and for preparation of vaccine lymph respectively. A bureau of maternity and child health and a bureau of vital statistics and epidemiology have already been established. The Department of Nutrition functions separately in the Medical Department. A leprosy officer is also attached to the Medical Department. A Bureau of Tuberculosis has also been established in the Directorate of Public Health. In the new set up existing regional Assistant Directors are proposed to be converted into functional Assistant Directors. Only two bureaux would, therefore, have to be added. Thus with existing sanctions it would be possible to provide the Directing staff for each of the bureau proposed above. Malaria and other insect borne diseases, T. B., Maternity and Child Health, Epidemics and Vital Statistics, Public Health Laboratory, Vaccination, Leprosy, Nutrition and Veneral Diseases will each form a bureau. Rural sanitation and school health will form one bureau and Health Education and Public Health Training and Administration will form another bureau making 11 bureau in all each of which will be placed in charge of the 6 functional Assistant Directors and 3 regional Assistant Directors working in the Health Department and the Assistant Director in charge of the Department of Nutrition and the Leprosy Officer now working in the Medical Department having been transferred to the Health Department. While each functional Assistant Director would specialise in his own field he would also have an over-all comprehensive public health outlook so that for purposes of supervision at the peripheral level, each functional Assistant Director will be assigned three or four districts only which would give him an opportunity to gain intimate contact with the functioning of this peripheral service. Full co-ordination between the various Assistant Directors would be secured at the State level.

2. Proposals for purchasing a building are well under way and part of the purchase price of the building will have been paid in the First Plan period. The provision made in the Second Plan is for the non-recurrent capital expenditure required for paying the balances of purchase price and for purchase of equipment only.

SCHEME No. 343.

Name of the Scheme.—**Preparation of layouts for Resiting and Extension of villages.**

Recurring	.. Rs.	1,00,000	Non-recurring	.. Rs.	Nil.
Total	.. ,,	1,00,000	Ultimate annual recurring .	,,	20,000

Remarks.—In the areas covered by the Community Development Projects and National Extension Service Scheme requests for preparation of layouts for villages are being received. Since the amount of work involved in the preparation of these layouts is considerable and cannot be dealt with by the existing staff a small establishment consisting of 1 Junior Assistant, 2 Surveyors, 2 Junior Draftsmen, 1 Peon and 2 Survey Khalasis has been created for one year in the first instance under the Deputy Assistant Consulting Surveyor to Government, Kolhapur, for " Preparation of layout plans " for the village sites in Kolhapur District.

Requisition for similar work is expected from the other Community Development Projects and National Extension Block areas as also from the rest of the areas in the State where resiting of entirely new villages or extension of the existing ones becomes necessary. It is, therefore, proposed to continue the staff already created during the Second Five-Year Plan period.

The scheme envisages preparation of layout for 25 villages per year, *i.e.*, a total number of 125 villages will be dealt with during the Second Plan period. The ultimate annual cost on account of establishment is estimated to be Rs. 20,000 or Rs. 1,00,000 for five years.

SCHEME No. 344.

Name of the Scheme.—**Grant-in-aid to Local Bodies for Public Health purposes.**

Recurring	.. Rs.	24,00,000	Non-recurring	.. Rs.	Nil.
Total	.. ,,	24,00,000	Ultimate annual recurring .	,,	4,80,000

Remarks.—In addition to the various Public Health Measures undertaken by Government grants are given to Local Bodies for Public Health measures such as vaccination, sanitation, disinfection of water supply, control of epidemic diseases etc. in their respective areas. The expenditure incurred for the purpose in the year 1955-56 is Rs. 3·11 lakhs. It is proposed to continue the grant-in-aid during the period of the Second Five-Year Plan for which a provision of Rs. 24 lakhs has been made.

HOUSING

(INDUSTRIAL HOUSING)

SCHEME No. 345.

Name of the Scheme.— **Housing for Industrial workers.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	7,50,00,000
Total	.. ,,	7,50,00,000	Ultimate annual recurring .	,,	Nil.

Remarks.—With the advent of the post-war industrial and commercial developments in the cities and towns of the State more and more people migrated from the nearby villages and came to settle in the cities and towns for their livelihood.

The overcrowding of towns and cities due to large scale migration coupled with a slump in the building industry caused housing shortages particularly in industrial cities and towns which called for action at the State level. Efforts were, therefore, made and are being made by Government to solve the housing problem by setting up colonies for Industrial workers in industrial areas. Since 1953-54 the Government of India have been giving funds on a loan-cum-subsidy basis for this scheme. In addition to direct construction of tenements which is done through the agency of a statutory Board called the Bombay Housing Board, the State Government also gives loans and subsidies to Co-operative Societies of industrial workers under the Government of India scheme. It is proposed to continue the present housing scheme for Industrial Workers on the existing basis and to construct 16,825 additional tenements in the several industrial towns during the Second Five-Year Plan period through the Housing Board as shown below and also to give assistance to Co-operative Societies of industrial workers :—

Serial No.	Name of place.	Industrial Housing	
		Number of tenements	Cost (Rs. in lakhs) (Non-recurring)
1	Bombay and Bombay Suburban District	7,980	399
2	Ahmedabad	6,650	199·5
3	Poona	332	9·96
4	Sholapur	332	9·96
5	Surat	332	9·96
6	Billimora	106	3·18
7	Baroda	212	6·65
8	Dharwar	212	6·65
9	Jalgaon	166	4·98
10	Nadiad (District Kaira) ..	166	4·98
11	Thana	337	10·11
	Total ..	16,825	665 lakhs. (in round).

The entire cost of the scheme is met from the loan and subsidy which will be received from the Government of India. The State Government will, however, have to bear the capital shortfall, if any, in the actual cost and ceiling costs prescribed by the Government of India for the tenements. As this shortfall depends on several factors such as actual selection of sites, location of tenements etc., it is not possible to make a firm estimate on account of this liability. On an *ad hoc* basis, however, a provision of Rs. 50 lakhs has been made on account of the estimated capital shortfall. The staff required by the Co-operative Department for administering the scheme is being shown under the sub-head Co-operation under which a provision of Rs. 56,000 has been made.

HOUSING

(URBAN LAND DEVELOPMENT)

SCHEME No. 346.

Name of the Scheme.—**Preparation of Development Plans of Towns.**

Recurring	.. Rs. 11,10,000	Non-Recurring	.. Rs. 15,000
Total	.. „ 11,25,000	Ultimate annual recurring .	„ 2,25,000

Remarks.—A Scheme for replanning and extension of towns designated as preparation of Master Plans of towns was included in the First Five Year Plan. This scheme comprised formulation of proposals for the future orderly growth of towns as also for the improvement of the existing built over portions thereof after a proper survey together with a detailed report explaining the various proposals and generally showing the priority of the work to be executed by the Local Authority.

These Master Plans have no statutory authority behind them. Hence the Local Authorities are not bound to implement the Master Plans. Government has, therefore, amended the Bombay Town Planning Act and the amended Act is expected to come into force shortly. Under this Act it has been made obligatory on the Local Authority to carry out the survey of the area within its jurisdiction and to prepare and publish within 4 years from the date of coming into force of the Act a Development Plan for the entire area and submit the same for the sanction of Government. The readymade Development Plan will be useful whenever the Local Authority concerned desires to take up a Town Planning Scheme for a particular area as the Plan will indicate the manner in which the development and improvement of the entire area within the jurisdiction of the Local Authority is to be carried out and regulated. Provision is also made in the new Act to give legal effect to the Master Plans already prepared by Government under the Five Year Plan.

Of the 218 Local Authorities in this State barring the 3 Corporations, no other Local Authority has adequate technical staff to prepare such Development Plans. This work would, therefore, have to be carried out by Government agency and at a much greater speed to conform to the provisions of the new Act. Due to the difficulty of getting technically trained personnel for such work it would be possible to complete only about 10 Development Plans every year. With a view to helping the Local Authorities in the preparation of Development Plans it is proposed to assist the local bodies in preparing such Development Plans for the Local Authorities. A total provision of Rs. 11,25,000 would be necessary for this scheme during the Second Five-Year Plan period.

The following staff will be required for this Scheme :—

Designation	Number of posts	Scale of pay Rs.
Deputy Assistant Consulting Surveyor to Government.	1	395—15—500—E.B.—20—600—E.B.—25—650.
Senior Assistants ..	6	295—15—400—E.B.—20—500—E.B.—25—650.

Deisgnation	Number of Posts	Scale of pay
		Rs.
Junior Assistants	10	200—10—300—15—390.
Surveyors	22	80—5—100—8—140—E.B.—10—220—E.B.—10—270.
Assistant Draftsmen	2	100—8—140—10—170.
Junior Draftsmen	6	70—3—85—4—125.
Tracers	8	46—3—85—4—105.
Town Planning Clerk	1	150—10—200.
First Clerk in Head Office	1.	150—10—200.
Accountant	1	100—8—140—10—150.
Senior Clerks	5	100—8—140.
Junior Clerks	7	46—3—85—4—125—5—130.
Peons	10	30—½—35.
Attendants	12	On Rs. 45 per mensem fixed.

HOUSING

(SPECIAL HOUSING SCHEME)

SCHEME No. 347.

Name of the Scheme.—**Housing of Gazetted Government Officers in Bombay City.**

Recurring .. Rs. Nil. Non-recurring .. Rs. 1,00,00,000

Total .. „ 1,00,00,000 Ultimate annual recurring „ Nil.

Remarks.—Separate schemes have been included in the Plan for providing residential housing for Class III and Class IV Government employees and other low income groups in certain towns and cities. In Greater Bombay the shortage of housing accommodation for Gazetted Officers is also of considerable magnitude. It is, therefore, proposed to construct houses for such Officers of the State Government. An *ad hoc* provision of Rs. 1 crore is made for the scheme in the Second Five Year Plan.

SCHEME No. 348.

Name of the Scheme.—**Housing of Class III and Class IV Employees of the State Government.**

Recurring .. Rs. Nil. Non-recurring .. Rs. 2,00,00,000

Total .. „ 2,00,00,000 Ultimate annual recurring „ Nil.

Remarks.—In the State there is an acute housing shortage in certain cities and towns like Bombay, Poona, Ahmedabad, etc. Moreover, due to the shortgae of the building material and their abnormal prices, the cost of construction has increased.

In order to encourage the building activity schemes for grant of assistance to individuals falling within the low income group or their Co-operative Societies have been proposed separately. In so far as State Government's employees are concerned it is proposed to undertake construction of tenements for the use of Class III and Class IV employees of the Government. An *ad hoc* provision of Rs. 2 crores is, therefore, made in the Second Five Year Plan for construction of houses for Class III and Class IV employees of the State Government.

SCHEME No. 349.

Name of the Scheme.—**Low-Income Group Housing.**

Recurrent	.. Rs.	Nil.	Non-recurring	.. Rs.	3,50,00,000
Total	.. „	3,50,00,000	Ultimate annual recurring	„	Nil.

Remarks.—The Five Year Plan envisages financing by the Central Government of low-income group housing to a certain extent by means of long-term loans. In pursuance of this the Government of India have formulated a Low-Income Group Housing Scheme. This scheme in the first instance is preferably to be worked in large areas where housing shortage is acute and extended later on to other places in the light of experience gained and the finances available for the construction of houses.

Under this scheme 30 year loans will be advanced to State Governments carrying interest at the usual rate for disbursement to persons whose incomes do not exceed Rs. 6,000 per annum, or to co-operative housing societies consisting of such persons. This loan assistance will be limited to a figure not exceeding 30 per cent. of the actual estimated price of the house inclusive of land subject to the maximum of Rs. 8,000 per house. Loans on almost similar terms will be given to State Governments for housing of the low-paid staff of their local bodies. In addition the Scheme provides for separate 3 year loans to the State Governments at the usual rate of interest for acquisition and development of building sites to be sold to low-income groups on a no-profit-no-loss basis.

The scheme, as formulated, deals mainly with allotment of funds by way of loans to State Governments. Administrative details as to how these loans should be further distributed by the State Government to the low-income groups are being worked out. The Scheme will be limited to the following categories, namely, co-operative housing societies, individuals and employees of local bodies. The first two categories will be advanced loans by Government in suitable instalments on the security of the land and the buildings to be constructed. As regards the third category, this part of the scheme will be undertaken by the local bodies themselves with the loan assistance granted to them by the Bombay Government under the Scheme. A separate scheme for construction of tenements for Class III and Class IV Government servants has been proposed.

During the Second Plan period a provision of Rs. 3·5 crores has been made for the scheme. This provision includes provision of Rs. 35·56 lakhs on account of loans to Backward Class Housing Societies and Rs. 1·75 lakhs on account of establishment of the Co-operative Department engaged for administering the loans.

SCHEME No. 350.

Name of the Scheme.—**Contributions towards the Share Capital of the Bombay Co-Operative Housing Finance Society.**

Recurring	.. Rs. Nil.	Non-recurring	.. Rs. 16,00,000
Total	.. „ 16,00,000	Ultimate annual recurring	„ Nil.

Remarks.—Government had undertaken to contribute to the share Capital of the Bombay Co-operative Housing Finance Society to the extent of Rs. 50,00,000 (but not exceeding the amount collected by the Society from members) by the end of the First Five Year Plan period. The total amount of such contribution by Government upto the end of the First Plan period was Rs. 34,00,000 thus leaving a spill-over of Rs. 16,00,000 to be contributed in the Second Five Year Plan period. Accordingly an amount of Rs. 16,00,000 has been provided in the Second Plan for the purpose.

HOUSING

(MISCELLANEOUS)

SCHEME No. 351.

Name of the Scheme.—**Administrative Buildings.**

Recurring	.. Rs. Nil	Non-recurring	.. Rs. 1,50,00,000
Total	.. „ 15,0,00,000	Ultimate annual recurring	„ Nil.

Remarks.—Due to the expansion of the activities of the various Departments and organisations of the State Government the need for extending the existing office buildings would be felt by Government. This would involve construction of new buildings or remodelling or expanding the existing ones for the Government administrative offices at various places in the State. An *ad hoc* provision of Rs. 1·5 crores on account of large buildings the cost of which is debited to capital accounts has, therefore, been made in the Second Plan. Other Minor buildings will also be necessary but these are not treated as a part of the development programme included in the Second Plan The cost of these has been treated as an item of committed expenditure.

OTHER SOCIAL SERVICES

(LABOUR WELFARE)

SCHEME No. 352.

Name of the Scheme.—**Extension of the Employees' State Insurance Scheme.**

Recurring	.. Rs. 57,50,000	Non-recurring	.. Rs. Nil.
Total	.. „ 57,50,000	Ultimate annual recurring	„ 92,00,000

Remarks.—The Employees' State Insurance Scheme which was inaugurated on 2nd October 1954 in Bombay now covers the factory workers of Greater Bombay numbering about 5·50 lakhs. Under the Employees' State Insurance Act, medical benefits have to be provided by the State Government to the insured workers, the cost of which is shared by the Employees' State Insurance Corporation and the State Government in the ratio 3 : 1. A budget provision of Rs. 79 lakhs was made for the year 1955-56 on this account. This provision was inclusive of the Corporation's share which is realised at the end of the financial year. The net cost to Government, therefore, was of the order of Rs. 20 lakhs. The extension of the Scheme to Ahmedabad and Sholapur is likely to take place in the Second Five Year Plan period. In Ahmedabad the workers have demanded that the Health Insurance Scheme should be made applicable to the members of their families and not to the insured workers only. On the existing basis of expenditure of Rs. 12 per worker per annum for provision of medical benefits the extra cost on the extension of the Scheme to the insured workers alone in Ahmedabad and Sholapur would come to Rs. 25 lakhs exclusive of the share of the Corporation for a period of five years.

If the Scheme is extended to the members of the families of insured workers at Bombay, Ahmedabad and Sholapur, the cost of medical benefit would go up to Rs. 4,60,00,000 for the entire Plan period. As the programme may be phased a lump provision of Rs. 230 lakhs would be required during the Second Five Year Plan period, of which the share of the Employees' State Insurance Corporation would be Rs. 172·50 lakhs.

In addition the Corporation has been approached for a loan of Rs. 1 crore for construction of Hospitals for providing additional bed accommodation for insured workers in Bombay, Ahmedabad and Sholapur. The loan will be repayable in 30 equated instalments. The buildings will vest in the State Government and the rent, rates and taxes in respect of the buildings will be included in the medical cost to be shared by the Corporation and the State Government. As the major portion of the construction work will fall in the Second Plan period a provision of Rs. 1 crore has been made for construction of buildings and provision of equipment.

The total provision required on account of extension of the Scheme is thus estimated at Rs. 3,30,00,000. The details of the cost are given below :—

	Rs.
Recurring—	
Provision of Medical Benefits	2,30,00,000
Non-recurring—	
Hospital Buildings and Equipment	1,00,00,000
Total ..	3,30,00,000

A provision of Rs. 57·50 lakhs, representing the net cost to the State Government, has been included in the State's Second Five Year Plan. The share of the Corporation, *viz.*, Rs. 272·50 lakhs, is not shown here.

SCHEME No. 353.

Name of the Scheme.—**Supervision over the Administration of the Bombay Shops and Establishments Act, etc.**

Recurring ..	Rs.	1,85,300	Non-recurring ..	Rs.	1,700
Total ..	,,	1,87,000	Ultimate annual recurring .	,,	45,488

Remarks.—For extending the benefit of Payment of Wages Act to all the establishments covered by the Bombay Shops and Establishments Act, powers are available under the latter Act. On application of the Payment of Wages Act, the

Inspectors appointed under the Bombay Shops and Establishments Act become Ex-Officio Inspectors under the Payment of Wages Act. At present the Bombay Shops and Establishments Act is administered by the Local Bodies at the several places to which the Act has been applied and Government pays grant-in-aid to them. If any extra expenditure is incurred by the Local Bodies as a result of the application of the Payment of Wages Act to shops and establishments, the local bodies will have to be paid grant-in-aid on the same basis on which it is given grants for the enforcement of the Bombay Shops and Establishments Act. It has also become necessary to have adequate supervising machinery to ensure proper enforcement of the Act through the local authorities as a number of complaints in this regard have been received. It is, therefore, proposed to appoint the following staff for supervision over the administration of the Bombay Shops and Establishments Act and the application of the Payment of Wages Act to Shops and Establishments.

Bombay

(1) One Officer in Assistant Commissioner's grade.

(2) One Superintendent.

(3) One Senior Clerk.

(4) One Junior Clerk.

(5) Two Peons.

Mofussil

(1) One Officer in Assistant Labour Officer's grade each at Sholapur and Ahmedabad.

(2) One Senior Clerk for each office.

(3) Two Peons for each office.

The total cost of the schemes is Rs. 1.87 lakhs out of which an amount of Rs. Rs. 1,85,300 is recurring and Rs. 1,700 is non-recurring.

SCHEME No. 354.

Name of the Scheme.—**Socio-Economic Surveys, etc.**

Recurring	.. Rs.	6,78,856	Non-recurring	.. Rs.	10,144
Total	.. „	6,89,000	Ultimate annual recurring.	„	1,71,380

Remarks.—The Minimum Wages Act requires periodical revision of the minimum wages fixed under the Act for the several industries to which the Act has been applied. For this purpose it is necessary to assess the effects of the application of the Minimum Wages Act to the Scheduled employments and also to make a continuous survey of these industries for which a permanent machinery will also be useful for the purpose of ascertaining these employments where sweated conditions of labour exist so that such employments can be added to the Schedule to the Act for which necessary powers exist under the Act.

At present cost of living index series are compiled for the cities of Bombay, Ahmedabad, Sholapur and Jalgaon. These series are compiled on the basis of Family Budget enquiries conducted several years ago. As major changes in the consumption pattern have since taken place, it is necessary to revise the bases of these series and for that purpose it is proposed to conduct fresh Family Budget Enquiries at Bombay, Ahmedabad, Sholapur, Hubli and Dhulia or Amalner during the Second Five Year Plan period. Apart from the proposed Family Budget Enquiries it is necessary to bring upto date the data collected for the old wage census. Some aspects of the problem of unemployment such as rationalisation in cotton textile industry, unemployment among casual workers in engineering industry and extent of off-season unemployment among sugar mill workers have of late assumed significance. In view of paucity of any statistical data it has not been possible to examine them in proper perspective. It is, therefore, proposed to conduct a survey of these problems. Finally for the collection of statistics as required by the collection of Statistics Act, it is necessary to strengthen the existing staff. The Government of India have been insisting on the provision of adequate machinery for the collection of statistics. The Scheme, therefore, envisages establishment of a machinery to achieve this objective.

For the purpose of conducting all the above-mentioned enquiries and co-ordinating their work, it has been decided to constitute under the Second Five Year Plan a central machinery for which the following staff will be necessary :—

One Deputy Commissioner of Labour.

Two Supervisors in Assistant Labour Officer's grade.

Four Senior Investigators.

Fifteen Junior Investigators.

One Superintendent.

Four Senior Clerks.

Twelve Clerk-typists.

Six Peons.

The staff to be appointed for minimum wages survey work and for compilation of statistics under the Collection of Statistics Act will be of a permanent nature.

SCHEME No. 355.

Name of the Scheme.—**Research into Industrial Diseases and Hazardous Occupations.**

Recurring	.. Rs.	1,20,000	Non-recurring	.. Rs.	20,000
Total	.. ,,	1,40,000	Ultimate annual recurring .	,,	28,000

Remarks.—A scheme for Research into Industrial Diseases and Hazardous Occupations has already been undertaken in this State. Under this Scheme a nucleus staff of one Medical Inspector of Factories, one Analytical Chemist, one Laboratory Assistant, one Clerk and two Peons has been appointed. The work so far done under the scheme during the First Five Year Plan period was restricted to factories more or less in Bombay City only. With the existing staff under the scheme it has not been possible to undertake field surveys for the purpose of appraisal of industrial hazards in certain occupations. These surveys are essential as on their results, rules can be formulated for the protection of workers on the factory premises. A number of factories which are located outside Bombay City have yet to be surveyed. Besides, several factories have to be visited before the nature of the problem is determined and a solution found out. For this purpose the Medical Inspector of Factories will need assistance of Inspectorial staff as the presence of the Medical Inspector in the laboratory in Bombay is necessary. It is also proposed to expand the scope of the laboratory to enable the Medical Inspector to undertake bacteriological investigations into hazards of biological nature like anthrax, tetanus, brucellosis, leptospira, tubercule, etc. Preventive action can be taken only when all particulars of incidence and cause are known. For this type of research a bacteriological section will have to be added to the existing laboratory.

For the proposed expansion the following additional staff will be necessary :—

Two Junior Medical Inspectors.
One Laboratory Technician.
One Senior Clerk.
One Laboratory Assistant.
Two Laboratory Attendants.
One Peon.

The total additional cost on account of the expansion is estimated to be Rs. 1,40,000 of which Rs. 1,20,000 will be recurring and Rs. 20,000 non-recurring expenditure.

Scheme No. 356.

Name of the Scheme.—**Decasualisation Scheme for Textile Workers.**

Recurring	.. Rs.	3,34,212	Non-recurring	.. Rs.	41,786
Total	.. „	3,76,000	Ultimate annual recurring .	„	80,000

Remarks.—The scheme as it exists to-day is in operation for the cotton textile industry in the cities of Bombay, Ahmedabad and Sholapur and covers 3,30,000 cotton textile workers in the Bombay State. All the concerns covered by the Bombay Industrial Relations Act are brought under the scope of the present scheme. The scheme is working satisfactorily at Bombay and Sholapur. The necessity of placing the scheme on statute has been felt long back and it is proposed to undertake suitable legislation with a view to effective enforcement of this scheme.

It is accordingly proposed to reorganise the present set-up of the Sectional Offices which will be placed in charge of Employment Officers, additional posts for which will have to be created and also to extend gradually the benefit of the Scheme to other areas which have not so far been covered so as to bring within its scope approximately 4,60,000 additional workers in the textile industries. This would involve employment of additional staff.

The scheme has at present a Head Office in Bombay with the Commissioner of Labour as Manager, and the Government Labour Officer Bombay who is assisted by an Assistant Labour Officer as a Local Manager for Bombay. As these officers have other assignments, supervision of the scheme is as an additional charge involving considerable strain to the officers. It has not, therefore, been possible to devote adequate attention to the working of the Scheme. Moreover stricter control and supervision will be necessary when the scheme is made statutory. At present the scheme is being executed on a voluntary basis with a good deal of persuasion and co-operation of employers.

In the new set-up of the Scheme the existing system of keeping the Sectional Offices in charge of Senior Clerks will be discontinued and Employment Officers will be placed in charge of the Sectional Offices which will make for greater efficiency and improved standard. In order to effect stricter supervision inspectorial staff will be appointed. The Inspectors will be touring officers and will follow the submission made by the Sectional Offices and check up placings. They will keep watch over the unhealthy discrimination on the part of the Mills in the selection of workers submitted by the Scheme. Cases of rejection will be scrutinised thoroughly. For the gradual extension of the scheme to other areas, Sectional Offices staff will be necessary.

The total cost on account of the proposed expansion and of reorganisation is estimated to be Rs. 3,76,000 of which Rs. 3,34,212 is estimated to be the recurring cost and Rs. 41,788 non-recurring.

SCHEME No. 357.

Name of the Scheme.—**Reorganisation of the Institute for Labour Welfare Workers, Bombay.**

Recurring	.. Rs.	56,500	Non-recurring	.. Rs.	2,500
Total	.. ,,	59,000	Ultimate annual recurring,	,,	14,000

Remarks.—The Committee appointed to consider the question of the reorganising the Institute of Labour Welfare Workers in Bombay recommended that the Institute should be up-graded and that the nine months' general course in Labour Welfare work should be substituted by two years' professional course in Labour Welfare, as the trainees of the Institute are required to work as Social Workers in the fields of Labour and Industry. As the Diploma awarded by the Institute has been recognised as a requisite qualification for the purpose of making appointments of Welfare Officers in factories under the Welfare Officers Rules framed under the Factories Act, 1948, by State Governments, the up-grading of the Institute is necessary. The revised professional course of two year's in Labour Welfare providing a comprehensive and integrated curriculum of studies and field work has been introduced on 1st July 1955. The additional cost of Rs. 59,000 over the five years period on account of reorganisation includes Rs. 56,500 for meeting the recurring expenditure and Rs. 2,500 for non-recurring expenditure.

SCHEME No. 358 (I).

Name of the Scheme.—**Opening of additional " C " Type Labour Welfare Centres.**

Recurring	.. Rs.	3,45,000	Non-recurring	.. Rs.	45,000
Total	.. ,,	3,90,000	Ultimate annual recurring	,,	1,05,000

Remarks.—The Labour Welfare Board is at present conducting 54 Welfare Centres in major industrial cities. There are four types of centres, viz., 'A' type, 'B' type, 'C' type and 'D' type.

'A' type centres are housed in Government owned premises consisting of a big hall in the form of an auditorium with a stage at one end and a gallery at the other. An extensive playground is attached to the centre. 'B' type centres afford all amenities of an 'A' type centres but on a smaller scale. They are conducted in hired premises. 'C' type centres are also conducted in hired premises. Generally they have no facilities for outdoor games. But wherever possible, open spaces either adjoining the centres or in their vicinity are secured for conducting outdoor activities. There are at present 36 'C' type centres conducted by the Labour Welfare Board. The activities conducted at the centres include recreational programme such as cinema shows, radio listening, dramas, concerts, bhajans and music. Educational activities such as reading rooms and libraries and physical education such as indoor and outdoor games and wrestling are also conducted at the centres.

During the Second Five-Year Plan period, it is proposed to open 13 additional 'C' type centres at Belgaum, Billimora, Cambay, Chembur, Kadi, Kalol, Kirloskarwadi, Kolhapur, Navsari, Ogalewadi, Pachora, Petlad and Sangli.

The total cost on account of opening of these centres is estimated at Rs. 3·90 lakhs as shown below :—

	Rs.
Recurring	3·45 lakhs.
Non-recurring	0·45 lakhs.
Total ..	3·90 lakhs.

As the Labour Welfare activities conducted at these centres will be financed from the Labour Welfare Fund created by the Bombay Labour Welfare Fund Act the cost to Government on account of the scheme would be nil. Pending such time however as moneys under the Labour Welfare Fund Act are realised by the Labour Welfare Board, the Board will have to be given loan assistance by Government to enable it to conduct the Welfare activities at the proposed centres. The loans being of a short-term nature are not shown in the Plan.

SCHEME No. 358(II).

Name of the Scheme.—**Construction of enclosures to and Provision of seating arrangements at 'A' Type Centres in Bombay, Ahmedabad and Sholapur.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	1,50,000
Total	.. ,,	1,50,000	Ultimate annual recurring.	,,	Nil.

Remarks.—The Five 'A' type centres located in Bombay, Ahmedabad and Sholapur have open spaces attached to them for conducting various outdoor activities such as foot ball, volley-ball, hu-tu-tu and other out-door games. These grounds are not enclosed and consequently it is not possible to give to these places the necessary attention so as to make them really useful for organised recreational and cultural activities. It is, therefore, felt that these grounds should be properly enclosed with brick walls with seating arrangements in tiers built on the walls. In addition, suitable stages for open air dramatic and other entertainments need to be constructed on the grounds. The Bombay Labour Welfare Board has, therefore, proposed to carry out these additions and alterations to the playgrounds of these five "A" type centres located at Ahmedabad, Bombay, and Sholapur at an estimated cost of Rs. 1,50,000. It is expected that the major part of the expenditure will be met from donations in cash and materials and shramadan by workers attending these Centres. There will be no cost to Government.

SCHEME No. 358 (III).

Name of the Scheme.—**Starting of New Creches in Bombay State.**

Recurring	..	Rs	75,000	Non-recurring	..	Rs.	70,000
Total	..	„	1,45,000	Ultimate annual recurring		„	15,000

Remarks.—The Bombay Labour Welfare Board conducts two creches at Sholapur at an annual expenditure of Rs. 15,000. At these creches, children of working class women are looked after by trained Ayahs, the children are bathed and fed with milk. Toys are provided at the creches for the children. The board now proposes to expand this amenity by starting two new chreches in Bombay State at a total expenditure of Rs. 1,45,000 out of which Rs. 70,000 represents non-recurring expenditure on buildings and equipment. The places where these creches are to be located will be decided later. Since the expenditure would be met from the Labour Welfare Fund created under the Labour Welfare Fund Act, the cost to Government would be nil. Pending however such time as the moneys under the Labour Welfare Fund Act are realised Government may have to give assistance to the Labour Welfare Board in the shape of loans to enable the Board to expand this activity. The loans being of a short-term nature are not included in the Plan.

SCHEME No. 358 (IV).

Name of the Scheme.—**Opening of additional Nursery Schools.**

Recurring	..	Rs.	2,00,000	Non-recurring	..	Rs.	30,000
Total	..	„	2,30,000	Ultimate annual recurring .		„	40,000

Remarks.—The Bombay Labour Welfare Board has been conducting six Nursery Schools for the children of the workers between the age groups of 2½ years to 6 years (three in Bombay, two in Sholapur and one at Ahmedabad). At these schools, besides imparting pre-primary education to the children, milk and light snacks are also provided. It is now proposed that instead of supplying milk and light snacks, square mid-day meals should be supplied to children so that they may not be required to go home for their mid-day meals. The need for opening more such nursery schools has now been felt in order to extend the benefit to a larger number of children. It is expected that the Central Social Welfare Board would sanction grant-in-aid to such nursery schools, to the extent of 50 per cent. of the cost. The Bombay Labour Welfare Board, therefore, proposes to start during the Second Five Year Plan period 6 more Nursery Schools. The total cost on account of these Nursery Schools is estimated at Rs. 2,30,000. Rs. 2,00,000 will be required for recurring expenditure and about Rs. 30,000 for non-recurring expenditure, on furniture and equipment. Since the expenditure would be met, partly from the Labour Welfare Fund created under the Labour Welfare Fund Act and partly from the assistance which may be received from the Central Social Welfare Board, the cost to Government would be nil. Pending such time, however, as moneys under the Labour Welfare Fund Act are realised Government may have to give assistance to the Labour Welfare Board in the shape of loans to enable the Board to meet its share of cost. The loans being of a short term nature are not shown in the Plan.

SCHEME NO. 358 (v).

Name of the Scheme.—**Promotion of Workers' Education.**

Recurring	..	Rs. 50,000	Non-recurring	..	Rs.	Nil.
Total	..	,, 50,000	Ultimate annual recurring .		,,	10,000

Remarks.—Under the First Five Year Plan " Schools for Citizenship and Trade Unionism " were started by Government, but subsequently as it was felt that this type of education would appropriately be provided by Trade Unions and Workers' Organisations and as a measure of retrenchment these schools were closed down in March 1952. Now that the Labour Welfare Fund has been created out of workers' own moneys the Labour Welfare Board considers it necessary to restart the scheme for Workers' Education in the field of civic and social responsibilities during the Second Five Year Plan period. This will also foster good industrial relations. The scheme aims at starting a series of lectures, discussion groups and seminars etc. at various Labour Welfare Centres. For this purpose it is estimated that an expenditure of Rs. 37,500 (recurring) would be required, on account of honoraria etc., to the lecturers.

In addition to this the Board also proposes to launch propaganda towards clean living and healthy homes for workers in industrial areas. At present field staff of Welfare Centres carry out chawl visits and maintain personal contacts with working class families. The Board proposes that this programme of chawl visits should be expanded so as to include a programme of health propaganda in working class localities during the Second Five Year Plan period. It is estimated that for this propaganda an expenditure of Rs. 12,500 is necessary. Thus the total cost of the scheme comes to Rs. 50,000. Since the expenditure would be met from the Labour Welfare Fund created under the Bombay Labour Fund Act the cost to Government on this account would be nil. Pending however such time as moneys under the Labour Welfare Fund Act are realised Government may have to give assistance in the shape of loans to the Labour Welfare Board to enable the Board to undertake this scheme. These loans being of a short-term nature have not been shown in the Plan.

SCHEME NO. 358 (VI).

Name of the Scheme.—**Grant-in-aid to Libraries.**

Recurring	..	Rs. 1,65,000	Non-recurring	..	Rs.	22,000
Total	..	,, 1,87,000	Ultimate annual recurring .		,,	33,000

Remarks.—In order to prevent the workers who are made literate from lapsing into illiteracy and to create a taste for reading books and periodicals, private institutions are encouraged to start circulating libraries in areas predominantly inhabited by workers. Assistance is given to these institutions for purchase of books and periodicals. It is proposed to expand these facilities by giving similar assistance to 200 new institutions during the Second Plan period. A total provision of Rs. 1,87,000 will be made by the Board for this purpose of which Rs. 22,000 will be non-recurring expenditure required for initial supply of books to the institutions and Rs. 1,65,000 will be recurring expenditure on account of supply of periodicals and replacement of books. As the grants would be payable from the Labour Welfare Fund created under the Labour Welfare Fund Act the cost to Government would be nil. Pending such time, however, as moneys under the Act are realised by the Labour Welfare Board, assistance in the shape of loans will have to be given to the Board by Government to enable the Board to expand the facilities proposed. These loans being of a short-term nature have not been shown in the Plan.

SCHEME No. 358 (vii).

Name of the Scheme.—**Starting of Holiday Homes.**

Recurring	.. Rs.	1,00,000	Non-recurring	..	Rs.	25,000
Total	.. ,,	1,25,000	Ultimate annual recurring	.	,,	20,000

Remarks.—A provision of Rs. 25,70,000 was made in the Post-War Reconstruction Five-Year Plan for Holiday Houses for workers. The scheme was not, however, taken up owing to financial stringency and the high cost involved under the Scheme. The Bombay Labour Welfare Board which has since been set up is now responsible for undertaking various measures for the welfare of labour. Under Section 7 (*2*) (*d*) of the Bombay Labour Welfare Fund Act, the Labour Welfare Board may start holiday homes at places located not too far from important industrial areas. Since annual leave with pay has been provided for under the Factories Act, it is necessary that adequate facilities are provided to enable the workers to take the full benefit of this holiday. It is therefore proposed to start three holiday homes for workers during the Second Plan period. In view of the high cost of construction it is proposed to start these holiday homes in premises obtained on lease in the first instance. Efforts will be made to obtain suitable premises near Bombay City; at Amboli Ghat and at Baroda or some suitable centralised place in Gujarat. The total cost is estimated at Rs. 1,25,000 out of which non-recurring cost is Rs. 25,000 and the rest is recurring.

Since the expenditure would be met from the Labour Welfare Fund created under the Labour Welfare Fund Act, the cost to Government on this account would be nil. Pending however such time as moneys under the Labour Welfare Fund Act, are realised Government may have to give assistance to the Labour Welfare Board in the form of loans to enable the Board to undertake this activity. These loans being of a short-term nature have not been shown in the Plan.

SCHEME No. 359.

Name of the Scheme.—**Evening Classes for Industrial Workers.**

Recurring	.. Rs.	2,39,000	Non-recurring	..	Rs.	Nil.
Total	.. ,,	2,39,000	Ultimate annual recurring		,,	,,

Remarks.—In all industrially advanced countries facilities for instructions are provided to existing industrial workers who want to improve their efficiency in their present jobs or to qualify themselves for higher jobs. Instructions take the form of part-time courses held mostly in the evenings. In India as majority of the existing workers have entered the industry without any scientific training, it is necessary to provide similar facilities to the industrial workers. With this object in view it is proposed to organise Evening Classes at the existing technical institutes as far as possible. Where technical institutes do not exist, industrial establishments will be encouraged to set up training centres within the factory premises. Facilities will be provided at these Evening Classes for training of such industrial workers as are discharged as a result of the introduction of new methods and technique to enable them to acquire the necessary knowledge for their eventual reabsorption in the Industry or to learn alternative trade for which there are demands in the country.

Courses will also be organised in evenings to enable industrial workers to appear for the National Trades Certificates examination.

The objects of the schemes which is a new one, are as under :—

(i) To improve the skill of existing workers,

(ii) To increase production and workers' earnings through higher efficiency,

(iii) To improve prospects for promotion within the establishments,

(iv) To reduce unemployment among discharged industrial workers by providing diversional training, and

(v) To facilitate workers to obtain National Trade Certificates.

The scheme is one of the six schemes formulated by the Central Government for the expansion of training facilities for craftsmen throughout the country under the Second Five Year Plan. The expenses relating to it are to be shared between the State and the Central Government in the proportion of 40 : 60.

The recurring cost of training one worker has been estimated at Rs. 31-4-0 per month. The total number of seats allotted to Bombay State are as under :—

	Seats.
1956-57	120
1957-58	240
1958-59	370
1959-60	425
1960-61	433
Total ..	1,590

These training courses will be organised in the industrial towns like Bombay, Ahmedabad and Sholapur, and will be extended to any other place where there is sufficient demand from workers.

The total estimated cost of the scheme is Rs. 5,98,000 of which only the State share, viz. Rs. 2,39,000 is included in the State Plan.

Scheme No. 360.

Name of the Scheme.—**Technical and Vocational Training Schemes.**

Recurring	.. Rs. 12,00,000	Non-recurring	.. Rs. 8,00,000
Total	.. „ 20,00,000	Ultimate annual recurring .	„ 2,33,835

Remarks.—At present facilities in technical and vocational training are available in Bombay, Poona, Kolhapur and Hubli, for 1,072 persons per annum in the State. In order to cope with increased demand for skilled labour and trained lower grade technicians, it is proposed to provide facilities for craft training for additional persons during the Second Five Year Plan period. The places suggested for opening of additional schools are Ahmedabad, Baroda, Ratnagiri, Surat, Sholapur and Belgaum. It is also proposed to increase the academic training period to 2 years and improve the quality of training by inviting honorary teachers from industries to give practical lessons and arranging for visits to allied industries and audio visual demonstrations of foreign practices on subjects of study. It is also proposed to re-equip existing training centres. The trainees will be paid a stipend of Rs. 60 each per mensem the duration of the training however being only 7 months in the first year.

2. The scheme is expected to help (i) supply of skilled labour for the growing needs of urban sector (ii) solve unemployment problem and (iii) improve production, reduce prices and increase wages and profits. The scheme will be implemented under the direction and supervision of the Ministry of Labour and the National Trade Certification Board to be set up shortly. The Ministry of Labour is expected to transfer the administration of the training centres to the State Government in 1956. The details of the scheme are yet to be finalised by the Government of India. In the mean-time, however, an *ad hoc* provision of Rs. 50 lakhs is proposed under the Second Five-Year Plan. The Government of India are expected to give 60 per cent. of both non-recurring and recurring expenditure as grant to the State Government for this Scheme. The share of the Government of India and State Government on the above basis will roughly be as shown below :—

	Rs.
Share of State Government :—	
Recurring	12,00,000
Non-recurring	8,00,000
Total	20,00,000
Share of Central Government :—	
Recurring	18,00,000
Non-recurring	12,00,000
Total	30,00,000
Grand Total	50,00,000

The State Plan includes only the State share of expenditure.

SCHEME No. 361.

Name of the Scheme.—**Apprenticeship Training of Craftsmen.**

Recurring	.. Rs.	9,82,000	Non-recurring	.. Rs.	18,000
Total	.. „	10,00,000	Ultimate annual recurring .	„	1,96,300

Remarks.—A systematic course of apprenticeship has been universally adopted as the best method of training highly skilled craftsmen for modern industrial establishments. With greater emphasis on industrialisation in the Second Five-Year Plan, there will be greater demand for highly skilled workers. It is, therefore, proposed to provide apprenticeship training facilities in large scale factories to at least a total number of 1,100 persons by the end of the Second Five Year Plan as shown below :—

1956-57	125
1957-58	250
1958-59	500
1959-60	750
1960-61	1,100 (cumulative).

To begin with it is proposed to use persuasion failing which legislative measures will have to be adopted. A stipend of Rs. 75 per mensem will be given to each trainee; and on the basis of a total of 1,100 trainees proposed to be trained by the end of the Second Five-Year Plan by this State, the scheme will cost Rs. 25 lakhs. Of this the Centre would bear an expenditure of Rs. 15 lakhs as shown below :—

	Rs.
Recurring	14,71,500
Non-recurring	28,500
Total	15,00,000

The State Plan includes only the State share of expenditure, viz., Rs. 10,00,000.

SCHEME No. 362.

Name of the Scheme.—**Expansion of the Employment Service.**

Recurring	.. Rs.	1,60,000	Non-recurring	.. Rs.	14,000
Total	.. „	1,74,000	Ultimate annual recurring .	„	32,000

Remarks.—There are at present 10 Employment Exchanges functioning in this State comprising one Regional, six Sub-Regional and three District Employment Exchanges. Initially, Exchanges were opened at places because of their industrial importance, or heavy incidence of recruitment during the Second World War. As the service developed, more Exchanges were opened either at the initiative of State Governments or because of special needs of a particular locality.

The Report of the First Five Year Plan endorsed the need for the reorganisation of an efficient Employment Service. The Planning Commission recommended an inquiry into the working of the Employment Service for reorientation of its methods. A Committee (known as the Shiva Rao Committee) has made such an enquiry and has submitted its Report which has been accepted by the Government of India. This Committee has recommended *inter alia* that the Employment Exchanges should be developed and strengthened so as to be able to collect factual information relating to the employment situation on a national, regional and local basis and for particular industries and occupations. It is, therefore, proposed to expand the Employment Service in a phased manner during the Second Five Year Plan.

The proposal for the transfer of the administration of Employment Exchanges to State Governments, which has been recommended by the Shiva Rao Committee, is under consideration of the Government of India. The extent to which it may be necessary to expand the Employment Service cannot be indicated at present until the Employment Exchanges are transferred to the State Government. In the meantime however a lump provision of Rs. 4,35,000 is proposed for the scheme, which will be implemented from the Second Year of the Plan period after this Government has gained some experience in the working of the existing Exchanges.

The scheme will be implemented jointly by the Central and State Governments. The Government of India has agreed to bear 60 per cent. of the cost on account of the scheme.

The total cost of the scheme is estimated as follows :—

	Rs.
Recurring	4,00,000
Non-recurring	35,000
Total ..	4,35,000

The State Plan includes only the State share of expenditure, viz., Rs. 1,74,000.

SCHEME No. 363.

Name of the Scheme.—**Collection of Employment Market Information.**

Recurring	.. Rs.	1,40,000	Non-recurring	.. Rs.	Nil.
Total	.. ,,	1,40,000	Ultimate annual recurring .	,,	28,000

Remarks.—The present Employment Exchange statistics are neither detailed nor adequate for the purpose of giving all the information that Employment Exchange operations can provide regarding the occupational, industrial and educational characteristics of the unemployed. Such information is necessary for formulating correct policies in regard to training and retraining, vocational and educational guidance and employment counselling. It is therefore proposed to collect information in regard to the chief characteristics of the unemployed together with trade-wise details in respect of the fresh registrants on the one hand and trade-wise statistics of employment opportunities arising in different industries and other economic sectors on the other. It is felt that the additional information if collected would render possible a meaningful analysis of shortages and surpluses of manpower which would enable Government to make a positive approach in regard to measures which may be necessary for adjusting the supply to demand, more particularly in regard to higher skilled and technical personnel.

It is also proposed to collect data regarding staff strength and vacancy position in Government and semi-Government establishments and other statutory and Local Bodies, with a view to studying the level and trends of employment and to know the volume and types of employment opportunities in such establishments. Information in regard to the vacancy position and staff strength is already being collected. The present proposal is to expand the scope of the information and to provide regularly firm data in respect of the entire sector on a national and State basis. It is felt that a big gap would be left in the employment picture if the private sector is not covered. It is, therefore, proposed that all Employmet Exchanges should gather and maintain employment information in regard to each private employer in their areas employing 50 or more workers in the shape of an Employer's Register. In the initial stages, it is proposed that the Employers' Register should contain information in regard to employment by sex and occupation. Later on, information in regard to wage rates etc. could be added. The main idea is to build up a comprehensive record of employment under all major employers in the country which would act as a bench-mark for the Collection of information in regard to employment and wage rates in specific occupations, industries and areas. The data will be collected, at least once a year, by the Exchange staff in respect of each establishment. The information contained in the Employers' Register would be regularly passed on to the Headquarters where it would be analysed on a national, State and local basis for being made available to the appropriate Central and State Government authorities. The success of this part of the scheme depends largely on the private employers who will be required to submit returns regularly. For this purpose, it is proposed to publish the types of establishments required to submit the reports as also the categories in respect of which such information is required. In order to ensure that such returns are regularly received, it is proposed to invoke the Collection of Statistics Act, or other suitable legislation. Side by side with the collection of the data of types of vacancies it is also necessary to collect data in regard to training facilities that are available and the out-turn of trained personnel in various occupations in order to ensure that the out-turn of trained personnel is adequate to meet the needs of industrial development. It is, therefore, proposed to collect comprehensive information in regard to all training facilities, whether imparted in colleges, technical institutions or in industrial undertakings, which lead specific occupation. Such information will be valuable for drawing up training to a programme. It will also provide essential data for employment counselling and vocational guidance. The details of the scheme are yet to be settled in consultation with the Government of India. In the meantime however an *ad hoc* provision of Rs. 3,50,000 is being made under the Second Five Year Plan as follows :—

	Rs.
Recurring	3,50,000
Non-recurring	*Nil.*
Total ..	3,50,000

Central assistance to the extent of 60 per cent. of the cost is expected to be received from the Government of India. The State Government share will, therefore, be Rs. 1,40,000 (recurring). The State Plan includes only the State share of expenditure.

SCHEME No. 364.

Name of the Scheme.—**Occupational Testing at Exchanges.**

Recurring	.. Rs.	27,000	Non-recurring	.. Rs.	Nil.
Total	.. ,,	27,000	Ultimate annual recurring	,,	5,400

Remarks.—At present interviews at Employment Exchanges are the principle means of obtaining information concerning the occupational qualifications of applicants as acquired through work, experience and specific education or training; but even when conducted in the best possible manner, the interview has many limitations. Assessment of an applicant's vocational ability is possible through the use of proficiency or trade tests. It is, therefore, proposed to introduce a programme of proficiency or trade testing at Employment Exchanges in collaboration with industry.

This will necessitate making provision for payment of a nominal fee for applicant to the industrial concerns which agree to participate in the programme.

The scheme will be implemented jointly by the Central and State Governments. The details of the scheme have yet to be settled in consultation with the Government of India. In the mean time, however, a lump provision of Rs. 67,000 is proposed to be included in the Plan.

Central assistance to the extent 60 per cent. of the cost is expected to be received from the Government of India. The net cost to the State Government will, therefore, be Rs. 27,000 (Recurring) on this basis. The State Plan includes only the State share of expenditure.

SCHEME No. 365.

Name of the Scheme.—**Appointment of a Non-Official Industrial Council for Health, Hygiene and Safety.**

Recurrent	.. Rs.	1,48,000	Non-recurrent	.. Rs.	2,000
Total	.. ,,	1,50,000	Ultimate annual recurrent.	,,	12,850

Remarks.—The Factories Act, 1948, and the Rules framed thereunder contain detailed provisions for the health, hygiene and safety of workers. Wherever possible, standards have been prescribed for giving effect to these provisions and the Factory Inspectorate has been making all possible efforts to induce the employers to introduce the required health and safety measures. On the recommendation of the State Labour Advisory Board in its meeting held in June 1952, Government has set up Regional Tripartite Committees to advise Government and the Factory Inspectorate regarding the standards to be accepted under the Factories Act and the measures to be taken to remove the difficulties experienced by employers in providing the necessary improvements.

As the Industrial Conditions Enquiry Committee constituted by the State Government has, however, remarked while the Factories Act states minimum legal requirements necessary for health, safety, etc. much more than the mere following of minimum requirements is necessary to ensure the required high standard and the attainment of such standard calls for a much greater voluntary effort on the part of all concerned. Experience in other countries has shown that much more could be achieved if non-official agencies develop their activities to educate employers and workers alike on the need to ensure health, hygiene and safety in factories. The Industrial Conditions Enquiry Committee has stressed the need of such a voluntary organisation in this State which would work in close co-operation with the Factory Department.

For these reasons it is proposed to set up a non-official Council which will take interest in and cultivate public opinion about industrial health, hygiene and safety in factories. It may form branches in various industrial Centres and may also set up Safety Councils in factories representing employers and employees. The proposed Council may be tripartite in character representing non-officials, employers and employees except that the Safety Councils may be bipartite. The Councils will contact the workers and tell them what to do and what not to do by leaflets, lectures, cinema slides and other means of propaganda. They will also contact the employers and pursuade them and guide them in setting up safety devices and in maintaining health and hygiene in factories. The work of the Councils will mainly consist in creating public opinion and giving help and guidance and achieving results by voluntary efforts and not by process of law. The technical experience of the Factory Department will, however, be available to the Council which will work in close collaboration with that Department.

The expenditure likely to be incurred in connection with this scheme is estimated at Rs. 1,50,000 during the period of the Second Five Year Plan.

The details of the staff proposed to be entertained are as shown below :—

1 Inspector of Factories (who will act as Secretary) Rs. 220—15—440—E. B.—20—500.

1 Steno-typist—Rs. 100—5—120—8—200.

1 Senior Clerk—Rs. 120—10—200—E. B.—10—250.

1 Clerk-typist—Rs. 75—5—140—E. B.—6—200.

1 Peon—Rs. 35—½—40.

OTHER SOCIAL SERVICES

(WELFARE OF SCHEDULED TRIBES)

SCHEME No. 366.

Name of the Scheme.—**Special measures for Vimukta Jatis and Scheduled Tribes.**

Recurring	..	Rs.	1,12,500	Non-recurring	.. Rs.	6,59,000
Total	..	,,	7,71,500	Ultimate annual recurring ..	,,	37,500

Remarks.—Various measures have been separately proposed for the Welfare of the Backward Classes. Among the different sections of the Backward Classes, the Scheduled Tribes and the Vimukta Jatis are relatively more backward and, therefore, need special attention from the State Government. Accordingly, special concessions, *viz.*, free legal aid, free supply of clothing to pupils etc., are being given and schemes for starting creches, training camps etc., are already being implemented for the benefit of these communities. The State Government is spending on an average Rs. 1·97 lakhs on special schemes per annum. The activities in this field will be intensified during the Second Five Year Plan period as detailed below :—

	Total cost Rs.	Central grants Rs.	Cost of State Government Rs.
A. *Special Schemes for Vimukta Jatis—*			
(1) Grants to Voluntary Agencies for the appointment of additional propagandists (the number of propagandists is proposed to be increased from 9 to 14	22,500	22,500	....
(2) Improvement of water supply in Ex-Criminal Tribes localities	1,49,000	1,49,000	....
Total ..	1,71,500	1,71,500	
B. *Special Schemes for Scheduled Tribes—*			
(1) Intensification of propaganda among the Scheduled Tribes, Five new propagandists are to be appointed every year. A grant of Rs. 2,000 is proposed to be paid to Voluntary Agencies every year as non-recurring grant on approved items for propaganda ..	1,00,000	60,000	40,000
(2) Starting of 5 Model Colonies for Scheduled Tribes.	5,00,000	2,50,000	2,50,000
Total ..	6,00,000	3,10,000	2,90,000
Grand Total ..	7,71,500	4,81,500	2,90,000

The Central assistance has been calculated at the existing rates, *viz.*, in the case of grants to Voluntary Agencies for propaganda in the ratio of 3 : 2 and in the case of model colonies on 50 per cent. basis in the case of the Schemes for the welfare of the Scheduled Tribes and 100 per cent. in the case of the schemes for the welfare of the Vimukta Jatis.

The total cost of these measures would be Rs. 7,71,500 of which the Central share would be Rs. 4,81,500 and the State share would be Rs. 2,90,000.

SCHEME No. 367.

Name of the Scheme.—**Development of Scheduled Areas and under-developed Areas.**

Recurring ..	Rs. Nil.	Non-recurring ..	Rs. 23,55,000
Total ..	„ 23,55,000	Ultimate annual recurring .	„ Nil.

Remarks.—This scheme provides for special measures like bunding, irrigation wells, development of Co-operative Societies and village approach roads in the following areas according to priority :—

(i) Merged Scheduled Areas	40 per cent.
(ii) Non-merged Scheduled Areas	40 per cent.
(iii) Other Adiwasi and under-developed areas ..	20 per cent

It is proposed to spend Rs. 23,55,000 as mentioned below :—

	Rs.
Irrigation Wells.—350 wells at a cost of Rs. 2,000 per well ..	7,00,000
Bunding.—4,000 acres at a cost of Rs. 500 per acre ..	2,00,000
Development of Co-operative Societies	4,55,000
Village approach roads 200 miles at a cost of Rs. 5,000 per mile.	10,00,000
Total ..	23,55,000

The entire expenditure of Rs. 23,55,000 will be borne by the Government of India.

SCHEME NO. 368.

Name of the Scheme.—**Financial assistance to Industrial Co-operative Societies from Scheduled Areas.**

Recurring ..	Rs.	82,800	Non-recurring ..	Rs.	50,000
Total ..	,,	1,32,800	Ultimate annual recurring .	,,	16,560

Remarks.—There are nearly 15 Industrial Co-operative Societies (other than forest labourers' and labour contract societies) in the Scheduled areas of the Bombay State. It is expected that 2 more such societies would be organised each year during the Second Five Year Plan period. In view of the meagre resources of these societies, they are not able to secure the services of efficient hands to work as their secretaries, accountants, etc. It is, therefore, proposed to give grant-in-aid of Rs. 1,200 per year to such society during the Plan period for three years. The number of societies to be assisted and the amount of expenditure involved are as below :—

	1st Year	2nd Year	3rd Year	4th Year	5th Year
Number of Societies ..	15 Old 2 New	15 Old 4 New	15 Old 6 New	6 New	6 New
	Rs.	Rs.	Rs.	Rs.	Rs.
Amout of grant-in-aid ..	20,400	22,800	25,200	7,200	7,200

It is also proposed to give Rs. 2,000 per Society as contribution towards their share capital to enable these societies to secure necessary funds for their working capital from Central Financing Agencies. Each Society will receive this grant only once. Accordingly, a provision of Rs. 10,000 per annum or Rs. 50,000 for five years, will be necessary for contributing to the share capital of 15 old and 10 new societies during the Second Five Year Plan period. The total cost of the scheme will be Rs. 1,32,800. The Government of India will be requested to bear 75 per cent. of the cost of the scheme.

OTHER SOCIAL SERVICES

(WELFARE OF SCHEDULED CASTES AND BACKWARD CLASSES)

SCHEME NO. 369.

Name of the Scheme.—**Grant of Loans and Subsidies to Backward Class Trained Artisans.**

Recurring	.. Rs.	Nil.	Non-recurring	.. Rs.	2,00,000
Total	.. ,,	2,00,000	Ultimate annual recurring .	,,	Nil.

Remarks.—In order to enable Backward Class artisans and Backward Class students, who have taken training in peripatetic and other industrial schools, to set up in trade it is necessary to give them some financial assistance. Government have at present been giving financial assistance by way of loans and subsidies to such Backward Class artisans on adequate security. Due, however, to their poverty, many Backward Class artisans are not able to produce security and thus to avail themselves of the Scheme. It is, therefore, proposed to give loans and subsidies on personal security every year to about 100 Backward Class persons who will be trained in various training schools. These persons will be given an assistance upto a maximum of Rs. 500 for starting industries, 25 per cent. of this assistance being subsidy and the remaining portion being loan. The maximum assistance would not be required in all cases. The total cost on account of grant of loan and subsidy will, therefore, be Rs. 2,00,000 (Rs. 1,50,000 as loan and Rs. 50,000 as subsidy). Out of 100 artisans to whom assistance is proposed every year, 20 persons may be from among Scheduled Tribes and 8 from among Vimukta Jatis. As the Government of India give a grant of 50 per cent. of the expenditure on Scheduled Tribes and 100 per cent. of the expenditure on Vimukta Jatis it is estimated that the Government of India grant will be to the extent of Rs. 9,000 as shown below :—

	Number of Persons.	Amount of Loan	Amount of Subsidy	Government of India's share
		Rs.	Rs.	Rs.
Scheduled Tribe persons ..	100	30,000	10,000	5,000
Vimukta Jatis persons ..	40	12,000	4,000	4,000
Scheduled Caste and other Backward Class persons	360	1,08,000	36,000	...
Total ..	500	1,50,000	50,000	9,000

SCHEME NO. 370.

Name of the Scheme.—**Grants to Voluntary Agencies for Welfare Work among Backward Classes in Merged States territories.**

Recurring	.. Rs.	1,00,000	Non-recurrnig	.. Rs.	Nil.
Total	.. ,,	1,00,000	Ultimate annual recurring .	,,	20,000

Resmarks.—In order to encourage Voluntary Agencies to extend their activities in the merged States territories, Government has given the following concessions :—

(1) The entire expenditure incurred by the voluntary agencies on pay and allowances of their propagandists is borne by Government on full cost basis.

(2) The Backward Class Hostels for boys started by these agencies are paid grants at the enhanced rate admissible for Backward Class Hostels for girls.

The concessions were originally meant for all merged States territories. Later on they were restricted only to the Scheduled Areas of the Merged States territories Considering the relative backwardness of all merged areas, it has been decided to continue these concessions during the Second Five Year Plan period and also to extend them to the Non-Scheduled areas of the merged territories.

It is expected that the Voluntary Agencies would appoint 8 additional propagandists—3 predominantly in tribal areas and 5 in other areas and open 3 hostels—one in tribal areas and two in Non-Tribal areas.

The total expenditure by way of Government grant would be approximately Rs. 1 lakh. On this expenditure, the Central grant share on account of the pay of the propagandists and hostels at 75 per cent. rate would be Rs. 25,000.

SCHEME No. 371.

Name of the Scheme.—**Measures for the eradication of Untouchability.**

Recurring	.. Rs.	24,72,700	Non-recurring	.. Rs.	4,86,300
Total	.. ,,	29,59,000	Ultimate annual recurring	.. ,,	5,99,675

Remarks.—Under Article 17 of the Constitution of India untouchability has been abolished and its practice in any shape or form is forbidden. The Union Government has recently enacted the Untouchability (Offences) Act to enable the State Governments to intensify their drive for the removal of Untouchability. In the Bombay State, a start in this direction was already made and necessary legislation was enacted. Various measures for the eradication of untouchability such as propaganda through films, posters, radios, dramas, kirtans and ballads, provision of special facilities for social education, starting of Balwadis, grants to Voluntary Agencies for propaganda, organisation of training of Harijans and for conducting cosmopolitan hostels, etc. have been already undertaken by this State. On these measures the State Government is spending a little over Rs. 8 lakhs per annum. During the Second Five Year Plan period it is proposed to continue all these measures on a wider scale. The details of the measures are given below :—

Scheme	Additional cost Rs.
(*A*) *Publicity and Propaganda*—	
(i) Grants to Voluntary Agencies for organising social melas	2,10,000
(ii) Organisation of programmes through ballad singers and Kirtankars	2,10,000
(*B*) *Water Supply*—	
(iii) Repairs to wells near Harijan localities. It is proposed to repair 804 wells during the Plan period at a cost of Rs. 500 per well instead of 40 wells per annum as at present	4,02,000
(*C*) *Education*—	
(iv) Increasing the number of Sanskar Kendras from 35 to 78	2,88,000

	Additional cost Rs.
(v) Encouragement grant to Balwadis in Harijan localities. It is proposed to increase the number of Balwadis to whom grants would be payable, from 11 to 60	3,84,500
(vi) Increased grants to cosmopolitan hostels ..	6,75,000
(D) Grants to Voluntary Agencies—	
(vii) Increased grants to Voluntary Agencies for training and appointment of propagandists, Sanchalaks, etc.	3,20,000
(viii) Training of Scheduled Castes in improved methods of hereditary occupations	94,000
(ix) Miscellaneous grants	3,19,000
Total additional cost for 5 years ..	29,02,500

In addition the following 3 measures will be implemented during the Second Five Year Plan period :—

	Estimated cost for five years Rs.
(1) Patronising useful books depicting the evils of Untouchability	34,000
(2) Award of prizes to Kalapathaks	22,500
(3) Messing allowance to Scheduled Caste students in hostels attached to Government and Non-Government colleges. At present these students get only room-rent concession. In order to encourage mixing of Scheduled Caste and Non-Scheduled Caste students, the Scheduled Caste students will be given messing allowance to enable them to stay in the hostel ..	2,00,000
Total for five years ..	2,56,500

The total cost for five years on account of these 3 new measures is estimated to be Rs. 2,56,500. A provision of Rs. 2,00,000 for messing allowance to Scheduled Caste students has already been included in the Educational Plan. The net additional cost to be included in this Plan will, therefore, be Rs. 56,500.

The total cost on account of the above new proposals and expansion of existing facilities comes to Rs. 29,59,000 during the Second Five Year Plan period. This will be in addition to the existing expenditure of Rs. 8·02 lakhs per annum or Rs. 40·10 lakhs for five years. The Government of India will bear the entire cost both on account of continuance of the existing measures and on account of the new measures and expansion proposed above.

SCHEME No. 372.

Name of the Scheme.—**Grant of Financial Assistance by way of subsidies to Co-operative Housing Societies of Backward Classes, etc.**

Recurring	.. Rs.	Nil.	Non-recurring	..	Rs. 24,34,000
Total	.. ,,	24,34,000	Ultimate annual recurring .	,,	Nil.

Remarks.—At present the following concessions are being given to the Co-operative Housing Societies of the Scheduled Castes and Scheduled Tribes :—

(1) Loans to the extent of 75 per cent. of the estimated cost of buildings according to the typed designs.

(2) Free grant of land for housing purposes.

(3) Subsidies towards management expenses at Rs. 10 per tenement for the first two years and at Rs. 5 per tenement thereafter till the loan is repaid.

It is proposed to extend the benefit of the Scheme to the Vimukta Jatis also.

During the Second Plan period 162 Housing Societies as shown below would be given assistance :—

		Rs. in'000	
	Number of Societies	Amount of subsidy	Central Grant
Scheduled Caste Societies ..	81	1,215	1,215
Scheduled Tribe Societies ..	56	844	422
Vimukta Jatis Societies ..	25	375	375
Total ..	162	2,434	2,012

It is estimated that the subsidy requirements of each society would be about Rs. 15,000.

For the Societies of Scheduled Castes, Scheduled Tribes and Vimukta Jatis financial assistance by way of subsidies would be shared by Government of India in full in the case of Societies of Vimukta Jatis Tribes and Scheduled Castes and at 50 per cent. rate in the case of Societies of Scheduled Tribes Out of the total cost of Rs. 24,34,000 the Government of India share will be Rs. 20,12,000. The provision for loans is made separately under 'Housing'.

SCHEME No. 373.

Name of the Scheme.—**Provision of Medical and Public Health Facilities in Scheduled Areas.**

Recurring	.. Rs.	5,88,500	Non-recurring	..	Rs. 5,25,500
Total	.. ,,	11,14,000	Ultimate annual recurring .	,,	1,29,000

Remarks.—**At present there are three mobile dispensaries in the Scheduled Areas. Due to the hilly nature of these areas medical facilities for these areas can be expanded mainly by adding to mobile dispensaries. It is, therefore, proposed to,** start 15 additional mobile dispensaries in these areas. It is also proposed to pay grants to Voluntary Agencies administering medical relief in the Scheduled Areas. Accordingly the following additional provision has been made in the Plan :—

	Rs.
(1) Opening of 15 additional mobile dispensaries	10,64,000
(2) Grants to Voluntary Agencies for Medical relief in Scheduled Areas	50,000
Total ..	11,14,000

The Government of India's assistance on a 50 per cent. basis would be Rs. 5,57,000.

SCHEME No. 374.

Name of the Scheme.—**Grant of Financial Assistance to Backward Class Agriculturists.**

Recurring	.. Rs.	25,000	Non-recurring	.. Rs.	33,75,000
Total	.. ,,	34,00,000	Ultimate annual recurring	,,	5,000

Remarks.—To enable the Backward Class agriculturists to improve yield from their farm, it is proposed to give the following facilities during the Second Plan period.

(Rs. in thousands)

	Total cost	Share of Government of India	
		Scheduled Tribes	Vimukta Jatis
(1) Grant of financial assistance for reclamation of land. (About 2,800 acres of land is estimated to be reclaimed out of the waste cultivable lands at a cost of Rs. 1,000 per acre).	2,800	5,00	3,00
(2) Supply of improved seeds at one half-rates ..	2,50	25	5
(3) Special assistance to poor Scheduled Tribe agriculturists for improvement of land.	1,50	75	....
(4) Supply of bullocks, implements and seeds to Ex-Criminal Tribe Cultivators at 1/4 rate.	1,75	....	1,75
(5) Stipends to Backward class students under training in the following courses :— (1) Crop Production Courses. (2) Animal Husbandry and Dairy Farming course. (3) Horticulture training class. (4) Veterinary First Aid Course. (5) Oil Engine Course.	25	2·5	....
Total ..	34,00	6,02·5	500

The total expenditure on these schemes will therefore be Rs. 34,00,000. The Government of India share will be Rs. 6,02,500 for Scheduled Tribes and Rs. 5,00,000 for the Vimukta Jatis.

Scheme No. 375.

Name of the Scheme.—**Expansion of facilities for Primary Education.**

Recurring	.. Rs.	31,30,000	Non-recurring	.. Rs.	22,40,000
Total	.. „	53,70,000	Ultimate annual recurring	„	9,98,500

Remarks.—Government has been spending about Rs. 14,49,600 annually on provision of special facilities to Backward Class pupils in primary Schools in the form of scholarships, free supply of books and slates, award of special prizes, Ashram Schools etc. It is proposed to enlarge the scope of these Schemes and also to grant additional concessions during the Second Five Year Plan period as detailed below :—

Special Measures for the Scheduled Tribes and Vimukta Jatis.

(Rs. in thousands)

	Total for five years	Government of India's Grant	
		Scheduled Tribes	Vimukta Jatis
(1) Opening of 23 additional Ashram Schools for the Scheduled Tribes.	23,03	1,151·5	....
(2) Award of prizes to Scheduled Tribe pupils and special pay to teachers in Schools in the Scheduled Areas.	2,20	1,10	....
(3) Development of the present 21 Ashram Schools for Scheduled Tribes and 9 for Vimukta Jatis into full grade Ashram Schools.	23,42	8,11	7,20
(4) Increase in the sets of Scholarships to Ex-Criminal Tribe pupils in Primary Schools from 100 to 125.	7·5	....	7·5
(5) Supply of free books and slates to Vimukta Jatis children.	97·5	....	97·5
(6) Supply of free cloth or spinning wheels to Vimukta Jatis.	30	....	30
(7) Opening of Ashram Schools for Vimukta Jatis ..	3,70	....	3,70
Total ..	53,70	20,72·2	12,25

Assistance from the Government of India at the existing sanctioned rates would be about Rs. 32,97,500.

Scheme No. 376.

Name of the Scheme.— **Secondary Education for Backward Class people.**

Recurrent	.. Rs.	10,00,000	Non-recurrent	.. Rs.	Nil.
Total	.. „	10,00,000	Ultimate annual recurrent	„	2,76,000

Remarks.—At present freeships are given to all eligible Backward Class pupils whose parents' or guardians' income is less than Rs. 3,000 per annum in big towns and Rs. 2,400 per annum in the rural areas. A provision of Rs. 18,87,000 has been made for the award of freeships to Backward Class pupils in Secondary Schools. As the number of Backward Class pupils has been increasing every year larger provision will be necessary on this account. A provision of Rs. 10,00,000 for this concession has been made under the Second Five-Year Plan to meet the additional requirements during the Second Plan period. Of this Central grant to the extent of Rs. 30,000 only would be available under this scheme, being the grant on account of the expenditure which is expected to be incurred on Scheduled Tribe pupils.

SCHEME No. 377.

Name of the Scheme.—**Facilities to Backward Class Students attending Colleges (University Education).**

Recurring	.. Rs.	10,00,000	Non-recurring	.. Rs.	*Nil.*
Total	.. „	10,00,000	Ultimate annual recurring	„	2,40,000

Remarks.—At present all eligible Backward Class Scholars (including Scheduled Caste, Scheduled Tribe and other Backward Class Students) in Colleges get the following concessions :—

(*a*) Maintenance Scholarship,

(*b*) Free studentship,

(*c*) Lump sum scholarship for the purchase of books and payment of examination fees, and

(*d*) Rent-free hostel accommodation in hostels attached to Educational Institutions.

The concessions will be continued during the Second Five Year Plan period. As the number of Backward Class students is expected to increase during the Second Plan period to roughly twice the present number at the end of the First Plan period, enhanced provision will have to be made for these concessions. It is, therefore, proposed to provide a sum of Rs. 10 lakhs for grant of scholarships, freeships, etc. to all eligible Scheduled Caste and Scheduled Tribe students and Loan scholarships of an equivalent amount to other Backward Class students who do not get the Government of India scholarships and for grant of messing allowance equal to the difference between the messing charges and the maintenance scholarship to Backward Class students dining at the common mess attached to College hostels. The details of the additional cost are as under :—

	Rs.
(1) Grant of freeships, scholarships, lump sum scholarships and rent-free accommodation to Backward Class pupils ..	7,50,000
(2) Hostel messing allowance	2,50,000
Total ..	10,00,000

The Government of India pay scholarships to almost every Scheduled Caste and Scheduled Tribe scholar. Again as the hostel messing allowance is designed to encourage the Scheduled Caste students to join the common messes, the expenditure on messing allowance to Schedule Caste students will be debitable to the Government of India grant for the eradication of Untouchability. The Central grant on this expenditure will, therefore, be Rs. 7·5 lakhs (Rs. 6,00,000 on Scholarships etc., to Scheduled Caste and Scheduled Tribe students and Rs. 1,50,000 on messing allowance to Scheduled Caste students).

SCHEME No. 378.

Name of the Scheme.—**Miscellaneous educational facilities to Backward Class Pupils.**

Recurring	.. Rs.	11,61,500	Non-recurring ..	Rs. 4,35,000
Total	.. ,,	15,96,500	Ultimate annual recurring	,, 2,93,000

Remarks.—Apart from the specific measures for promoting Primary, Secondary, Technical and Higher Education, Government has undertaken schemes for provision of training of Primary Teachers, Hostel facilities and other miscellaneous measures on which an annual expenditure of Rs. 25·50 lakhs is being incurred. It is proposed to expand these facilities and also to undertake new schemes during the Second Five Year Plan period at a total additional cost of Rs. 15,96,500 as shown below :—

(Rs. in thousands)

	Cost	Central Grant	
		Scheduled Castes	Vimukta Jatis
(1) *Special measures for the Vimukta Jatis.*			
(*a*) Grant to hostel managements for admitting additional Vimukta Jatis pupils.	50	....	50
(2) *Special measures for the Scheduled Tribes.*			
Short-term training courses for Primary teachers in the Scheduled Areas. These will be organised during vacation to enable the teachers to equip themselves to handle the problems affecting the tribal areas. Stipends at Rs. 35 p.m. or duty pay, as the case may be, will be paid during the training.	1,25	62·5	....
Total ..	1,75	62·5	50
General Measures for all Hostels.			
(1) Recognition of 40 additional hostels to be started by Voluntary Agencies. In recognising such hostels, hostels which admit non-Backward Class pupils will be given preference.	4,00	50	....
(2) Starting of Backward Class Hostel for Girls at Poona.	2,10	....	....
(3) Increase in the strength of existing Backward Class Hostels by 20 per cent.	7,00	25	....
(4) Payment of building grants to Backward Class Hostels at the existing sanctioned rates.	1,11·5	....	....
Grand Total ..	15,96·5	1,37·5	50

The total expenditure would thus be Rs. 15,96,500. The Government of India's grant on the existing basis is estimated at Rs. 1,87,500.

Scheme No. 379.

Name of the Scheme.—**Special Schemes for the uplift of Nomadic and Semi-Nomadic Tribes.**

Recurring	.. Rs.	62,73,500	Non-recurring ..	Rs. 22,41,500
Total	.. ,,	85,15,000	Ultimate annual recurring	,, 17,83,620

Remarks.—There are in the State of Bombay a number of communities which have no settled ways of life and which go about from place to place following their traditional occupations. There are roughly 43 nomadic communities and 10 semi-nomadic communities. Reasonably accurate figures of their population are not available. But their population may roughly be 20 to 25 lakhs. These communities may be divided into the following categories :—

(1) Those who follow begging as their occupation.

(2) Those who move from place to place giving entertainment performances.

(3) Those who belong to earstwhile criminal tribes.

(4) Artisans who move from place to place.

(5) Small-scale businessmen like Lamanis, Vansaries, etc.

(6) Primitive tribes like Phasepardhis, Haran Shikaris, and

(7) Small-scale professionals who move from place to place like Joshis (Palmists) Vaidus, etc.

The problem of the uplift of these communities is very urgent as these communities are not able to take much advantage of the general Schemes for the Backward Classes, due to their nomadic habits. Complete lack of education among these communities, lack of experience of agricultural operations and lack of aptitude for hard and substained work have made it difficult to settle them in any occupations or industries. It has therefore been decided to include the following special schemes for the uplift of these communities in the Second Five Year Plan.

	Cost
(1) *Special Staff*—	Rs.
(i) It is proposed to appoint three Nomadic Uplift Officers of the status of the Backward Class Welfare Officers, one for each region in the grade of Rs. 250/325 ..	1,80,000
(ii) Appointment of 15 Sevaks to persuade these tribes to send their children to Schools and hostels, to give up begging and to take to useful occupations, and carry on concentrative propaganda among these communities at selected 15 places round-about big towns and cities. These Sevaks will be paid Rs. 100 each ...	95,000
Total..	2,15,000

	Cost, Rs.
(2) *Education*—	
(i) It is proposed to induce these tribes to send their children to existing hostels. For this purpose, the existing hostels will be given grants on full cost basis as in the case of Vimukta Jatis, i.e. at Rs. 20 p. m. per inmate. It is proposed to enrol 800 additional inmates during the course of 5 years.	5,00,000
(ii) Free supply of books, clothes and award of scholarships to pupils belonging to these communities in Primary Schools-	2,60,000
(iii) Opening of 6 Ashram Schools with a predominance of pupils from these communities in the localities inhabited by these communities.	8,50,000
Total	16,10,000
(3) *Economic Uplift*—	
(i) Starting of 12 Training-*cum*-Production Centres with hostels attached to them. It is proposed to start 6 such Centres in the first year and 6 in the second year. It is proposed to train up 25 persons in each centre and to pay them Rs. 35 to meet hostel charges and pocket expenses.	16,00,000
(ii) Financial assistance to the persons trained at these production centres for setting up in trade.	4,00,000
(iii) Encouragement to hawking business. It is proposed to give financial assistance up to Rs. 800 each to 200 persons for starting hawking business.	1,50,000
(iv) Financial assistance to hereditary artisans like Ghisadis. It is proposed to give an amount up to Rs. 500 to such artisans.	2,50,000
(v) Free supply of goats and poultry. It is proposed to give poultry and goats to about 2,000 families.	2,00,000
(vi) Supply of milch cattle to Douries, Gopals, Vaghrise, tc. at ¼th cost.	5,00,000
(vii) Financial assistance to Nomadic Tribes agriculturists who have taken to agriculture for pursuing and improvement of land and for purchasing allied occupations like diary farming, poultry keeping, etc. on individual basis.	5,00,000
Total	36,00,000

	Rs.
(4) Financial assistance to Labour Contract Societies. It is proposed to organise 25 such societies and to assist them at the rate of Rs. 4,000 each.	1,00,000
(5) Financial assistance to Co-operative Housing Societies of Nomadic and semi-Nomadic tribes. It is proposed to start 50 Housing Societies which will construct 1,000 tenements at an average of cost of 2,500 each, including cost of land. Roughly 40 per cent. will be given by way of loan, 40 per cent. by way of subsidy, and 20 per cent. by way of contribution in the form of cash and labour.	16,13,000
(6) *Miscellaneous Schemes—*	
(i) Opening of Balwadis for children in localities roundabout cities and towns. It is proposed to open 15 Balwadis for these tribes.	1,87,500
(ii) Starting of Sanskar Kendras in localities round about towns and cities. It is proposed to open 15 such Sanskar Kendras.	1,80,000
(iii) Grants to Voluntary Agencies for appointment of propagandists. It is proposed to appoint 15 such propagandists. The Voluntary Agencies will be paid grant-in-aid at 80 per cent. on the emoluments of these propagandists.	90,000
(iv) Provision of wells in the housing colonies of nomadic tribes. About 40 wells at a cost of Rs. 4,000 each would be built.	1,60,000
(v) Ameliorative measures for the uplift of nomadic tribes women. It is proposed to appoint lady welfare workers, open special classes in tailoring, toy-making, embroidery, etc. and supply sewing machines and accessories after training.	5,00,000
(vi) Organisation of training camps for selecting nomadic tribes leaders and youths.	30,000
(vii) Economic, cultural and nutritional survey of nomadic tribes.	2,50,000
(viii) Preparation of pamphlets and posters	10,000
Total	13,62,000
Grand Total	85,15,000

Of these nomadic and semi-nomadic tribes, about 1/5th are Vimukta Jatis.

The Government of India bears the entire expenditure on the Vimukta Jatis schemes. It is therefore, hoped that 20 per cent. of the cost of the above schemes would be borne by the Government of India. The share of the Government of India would, therefore, be Rs. 6,48,000.

SCHEME No. 380.

Name of the Scheme.—**Financial Assistance to Forest Labourers' Co-operative Societies.**

Recurring	.. Rs.	3,56,250	Non-recurring	.. Rs.	3,93,750
Total	.. ,,	7,50,000	Ultimate annual recurring ..	,,	93,000

Remarks.—It is proposed to give assistance to the Forest Labourers' Societies under this scheme as shown below :—

		Rs.	
(i) Contribution to the Reserve Fund	..	3,000	
(ii) Contribution to management expenses per annum for 2 years ..	..	1,500	
(iii) Contribution for Welfare activities	..	1,500	per annum for 3 years.

It is proposed to assist 125 new societies in this manner as also to aid 84 existing societies.

The entire amount which is estimated at Rs. 7,50,000 will be paid by way of subsidy and as such the whole of the expenditure will be met from the Central assistance.

SCHEME No. 381.

Name of the Scheme.—**Scheme for Organisation of Industrial Training Centre for Ex-Criminal Tribes.**

Recurring	.. Rs.	1,40,208	Non-recurring	.. Rs.	10,328
Total	.. ,,	1,50,336	Ultimate annual recurring	,,	2,88,000

Remarks.—The Industrial Co-operative and Village Industries section of the Co-operative Department has already organised five industrial training centres for the Vimukta Jatis at Ahmedabad, Sholapur, Bijapur, Hubli and Gadag. These centres are working well. It is now proposed to organise one more training centre for the Vimukta Jatis at Jalgaon. Training will be imparted at this school in carpentry and smithy and tailoring. Twenty students will be admitted for training in each of the two crafts and thus 40 persons will be admitted at a time The trainees will be granted scholarships at the rate of Rs. 20 per month each. The duration of the training course will be 1½ years in carpentry and smithy and that of one year in tailoring. It is estimated that 60 students will be trained in carpentry and smithy and 100 students in tailoring during the five years and they will be engaged in the industry. Efforts will be made to formulate their co-operative societies or they will be granted financial assistance individually to settle in the respective industries.

As this is a training institution, the estimated receipts are Rs. 24,000.

Scheme No. 382.

Name of the Scheme.—**Scheme for Organisation of Additional Tailoring Schools for Backward Classes.**

Recurring	.. Rs.	64,000	Non-recurring	..	Rs.	8,000
Total	.. ,,	72,000	Ultimate annual recurring .		,,	16,290

Remarks.—As there is good scope for the development of the tailoring industry particularly among the Backward Classes, it is proposed to organise 2 additional tailoring schools for Backward Classes. The duration of the course will be one year. The trainees will be granted stipends at Rs. 20 per mensem each. After the completion of training, efforts will be made to organise a co-operative society or the trainees will be granted loan and subsidy individually for purchase of sewing machine and other necessary equipment. The details of the expenditure involved in working of the scheme during the five years are as under :—

	Non-recurring	Recurring	Total
	Rs.	Rs.	Rs.
1st year	8,000	..	8,000
2nd year	..	15,638	15,638
3rd year	..	15,851	15,851
4th year	..	16,221	16,221
5th year	..	16,290	16,290
Grand Total ..	8,000	64,000	72,000

The schools will provide employment to 2 Instructors and 2 Assistant Instructors. 120 persons will be trained at these schools and after training they will be engaged in the industry.

As these are the training classes, the estimated receipts are Rs. 12,800.

OTHER SOCIAL SERVICES

(Social Welfare)

Scheme No. 383.

Name of the Scheme.—**Scheme for Implementation of Welfare Extension Projects.**

Recurring	.. Rs.	Nil.	Non-recurring	..	Rs.	15,00,000
Total	.. ,,	15,00,000	Ultimate annual recurring.		,,	Nil.

Remarks.—During the year 1954-55 the Central Social Welfare Board launched a programme of 27 Welfare Extension Projects in consultation with the State Social Welfare Advisory Board, to cover each district in the State. The Welfare

Extension Project Scheme aims at extension of Welfare services for women and children in the rural areas. Welfare Extension Projects are being implemented by non-official Committees known as Project Implementing Committees, consisting of the representatives of voluntary welfare institutions working in or around the Project areas. Each project covers about 20 to 24 Villages covering a population of about 20,000 people and may have from five to seven Centres each catering to the requirements of 3 or 4 villages. The cost of a project consisting of five welfare centres is estimated to be about Rs. 21,000 per annum, 50 per cent. of which will be the share of the Central Social Welfare Board, the remaining 50 per cent., being borne by the beneficiaries and the State Government.

2. The policy regarding State assistance adopted by Government so far is that Welfare Extension Projects located in the Community Development Projects and National Extension Service areas would get assistance from the funds allotted for those schemes and those located outside the Community Development Projects and National Extension Service areas, it would be necessary for the State Government to make separate provision for meeting its share.

3. During the Second Five Year Plan period the programme of Welfare Extension Projects is proposed to be expanded by starting more projects in the State on an intensified scale. On the assumption that 27 more projects will be undertaken during each year of the Second Five Year Plan, the total cost to Government is estimated to be Rs. 36,45,000 at Rs. 21,000 per annum per new project of five centres each, and Rs. 3,000 per annum for continuance of the Centres started during the Second Five Year Plan period. To this must be added the grants on account of the maintenance of Centres started before the Second Five Year Plan.

The total cost of the scheme may be about Rs. 50 lakhs. This will have to be shared between the Central Social Welfare Board, the State Government and the Project Implementing Committees. The Central Board has advised that 50 per cent. of the cost should be borne by it and the remaining 50 per cent. shared equally between the State Government and the Project Implementing Committees. The State Government has, however, taken the view that the share of the State Government should be much lower after the initial stages. A provision of Rs. 15 lakhs is however, necessary for the purpose. This provision may suffice even if the scope of the Social Welfare Programme is enlarged during the Second Five Year Plan.

OTHER SOCIAL SERVICES

(WOMEN'S AND CHILDREN'S WELFARE)

SCHEME No. 384.

Name of the Scheme.—**Expansion of work under the Bombay Probation of Offenders Act, 1938.**

Recurring	..	Rs. 4,00,000	Non-recurring	.. Rs.	Nil.
Total	..	„ 4,00,000	Ultimate annual recurring .	„	1,38,000

Remarks.—At present the provisions of the Bombay Probation of Offenders Act are applicable in the areas of Greater Bombay and in the Districts of Ahmedabad, Poona, Sholapur, Dharwar, Belgaum, Bijapur, Surat, North Satara, Karwar, Baroda, South Satara and Ahmednagar. It is necessary to extend the provisions of the Act to the remaining districts also in the State. The Planning Commission has emphasised that probation service and welfare and after-care work for the prisoners discharged from the prisons and their families should be implemented on a wider scale. It is accordingly proposed to extend the provisions of the Act to the remaining districts of the State during the Second Five Year Plan, at an estimated cost of Rs. 4,00,000, by appointing additional staff for the purpose.

SCHEME No. 385.

Name of the Scheme.—**Services for welfare of women above the age of 21.**

Recurring	Rs.	22,040	Non-recurring	Rs.	97,960
Total	„	1,20,000	Ultimate annual recurring	„	4,970

Remarks.—At present grants are given by Government through the Juvenile and Beggars Department to private institutions working for the rescue and prevention of women in need and distress. There is a crying need for introduction of a programme for the welfare of socially handicapped women like widows, unmarried mothers, destitutes and deserted women in urban areas. It is also necessary to evolve a plan to render help to women who are in need of protection and treatment and who do not come under the purview of the Bombay Children Act. During the Second Five Year Plan, period it is proposed to give increased grants to private institutions and voluntary agencies working for the welfare of women and for introduction of welfare services for women above the age of 21, for which a provision of Rs. 1,20,000 will be required.

SCHEME No. 421.

Name of the Scheme.—**Social and Moral Hygiene and After-care Services.**

Recurring	Rs.	24,12,300	Non-recurring	Rs.	67,700
Total	Rs.	24,80,000	Ultimate annual recurring		4,80,000

Remarks.—The Central Government has sponsored a programme of social and moral hygien and after-care services with a view to providing (*a*) State Homes for rescued women requiring a fairly long period of social and environmental adjustment prior to giving vocational training ; (*b*) State Homes for after-care services to persons discharged from correctional, non-correctional and care institutions ; and (*c*) District Shelter Homes and Receiption Centres respectively for persons requiring after-care and housing pending transfer to State Homes and for temporary shelter of rescued women. The State Homes will provide separate arrangements for children between the age range 16 to 21 years. The State Government would provide these facilities with due regard to the facilities already available through official and non-official agencies. A detailed scheme estimated to cost Rs. 49·60 is being worked out. The cost would be shared equally by the Central and State Governments. The State Plan includes only the State share of expenditure, namely, Rs. 24,80,000.

Scheme No. 386.

Name of the Scheme.—**Opening of new Government Certified Schools, etc.**

Recurring .. Rs. 4,78,000 Non-recurring .. Rs. 7,50,000

Total .. ,, 12,28,000 Ultimate annual recurring ,, 84,600

Remarks.—At present there are nine Government certified schools and 19 recognised certified schools managed by private agencies in the Bombay State for reception, custody and education of the court committed children. The present number of certified schools is insufficient to accommodate the children coming under the purview of the Bombay Children Act, 1948. The existing Certified schools—Government and non-Government—need to be expanded and improved and also new schools require to be started. To enable the schools to function more effectively, it is proposed to intensify the vocational training and improve the general education. It is proposed to utilise the amount for this purpose.

Scheme No. 387.

Name of the Scheme.—**Opening of Additional Remand Homes.**

Recurring .. Rs. 1,30,000 Non-recurring .. Rs. 2,00,000

Total .. ,, 3,30,000 Ultimate annual recurring ,, 25,000

Remarks.—At present the Bombay Children Act, 1948 has been applied partly or fully to 19 Districts only of the Bombay State. Delinquent children in the remaining districts of the State cannot, therefore, be effectively treated under the present arrangements. It is necessary to extend the application of the Act to the entire area of the State as soon as possible. Such an extension will entail additional expenditure on account of the staff required for the purpose. In addition, it is proposed to undertake legislation with a view to bringing girls of the age range 16 to 21 years under the purview of the Bombay Children Act, 1948. To treat the additional children coming within the purview of the Act either because of its extension to the entire State or because of its proposed amendment, it will be necessary to open one additional remand home. During the Second Plan period it is proposed to open one additional remand home. The annual cost on account of this additional remand homes is estimated at Rs. 15,000.

Scheme No. 388.

Name of the Scheme.—**Reorganisation of the Juvenile Department.**

Recurring .. Rs. 2,02,000 Non-recurring .. Rs. Nil.

Total .. ,, 2,02,000 Ultimate annual recurring ,, 43,100

Remarks.—The activities of the Juvenile Department are increasing from year to year. They will increase considerably when the Second Five Year Plan for the Juvenile Welfare is put into operation. At present the Juvenile branch has only a nucleus organisation, which is inadequate even to cope with the existing work.

During the Second Five Year Plan period it will be necessary to reorganise the Juvenile Department and augment the inspecting as well as administrative staff. For this purpose it is necessary to appoint the following establishment.

Designation.	Scale of Pay.	No. of posts.
(1) Inspector of Certified Schools	(Rs. 300—600)	1
(2) Inspector of Certified Schools (Junior)	(Rs. 220—355)	1
(3) Office Superintendent	(Rs. 200—300)	1
(4) Assistant Inspector of Certified Schools	(Rs. 150—200)	3
(5) Head Clerk	(Rs. 150—200)	1
(6) Senior Clerk	(Rs. 100—140)	1
(7) Junior Clerks	(Rs. 46—130)	4
(8) Peons	(Rs. 30—35)	2

The ultimate annual recurring cost on account of pay and allowances of the above additional staff would be Rs. 43,100.

SCHEME No. 389.

Name of the Scheme.—**Establishment of Experimental Pilot Classification Centres.**

Recurring	.. Rs.	96,000	Non-recurring	.. Rs.	2,00,000
Total	.. ,,	2,96,000	Ultimate annual recurring	,,	12,000

Remarks.—At present the various Juvenile Courts are not equipped properly to judge the requirements of the child in its scientific perspective with the result that many times wrong commitments are made. It is, therefore, proposed that the Juvenile Courts should in the first instance, commit the children to the proposed Classification Centres from where they would be committed to institutions by the Chief Inspector of Certified Schools on the recommendations made by the staff of the Classification Centre. It is accordingly proposed to attach one classification centre to the Yeravda Industrial School and another in Gujarat. The Centres will have suitably trained personnel. The Head of the Institution will necessarily be a trained Psychologist with some knowledge of psychiatry. It is proposed to start the first centre in Poona in the first year. The second centre will be started in the third year of the second plan period, in Gujarat.

SCHEME No. 390.

Name of the Scheme.—**Opening and Aiding Aftercare Hostels with Workshop and Rehabilitation Bureau.**

Recurring	.. Rs.	90,000	Non-recurring	.. Rs.	7,00,000
Total	.. ,,	7,90,000	Ultimate annual recurring	,,	15,500

Remarks.—The children released from Certified Schools have often no proper home where they can start a new life to earn their livelihood and gain useful employment. They are, therefore, required to be given shelter and assisted to secure suitable employment. Unless proper after care facilities are provided for children released from Certified Schools, the work done for the rehabilitation of children under the Bombay Children Act will not show the desired results. The scheme, therefore, contemplates the running of a workshop on proper economic lines so as to provide such children with employment which would yield sufficient earning to cover their future rehabilitation. It is accordingly proposed to establish an After Care Hostel catering for about 50 inmates, with a workshop attached thereto. The following staff will be appointed :—

Designation.	Scale of Pay.	No. of Posts.
(1) Superintendent	150—250	1
(2) Probation Officer	100—200	1
(3) Trade Instructors	52—130	2
(4) Clerk	55—130	1
(5) Peons	30—35	3

SCHEME No. 391.

Name of the Scheme.—**Opening of Juvenile Guidance Centres.**

Recurring ..	Rs.	80,000	Non-recurring ..	Rs.	Nil.
Total ..	„	80,000	Ultimate annual recurring	„	13,500

Remarks.—With a view to preventing Juvenile Delinquency it is proposed to start four Juvenile Guidance Centres in which recreational and educational facilities will be provided for children. This will be run on the lines of Youth Clubs or Neighbourhood Houses so as to enable the workers of the Centre to establish contacts of informal nature with the children of the surrounding areas. The facilities proposed to be provided at the Centre include indoor and outdoor games and small library and other facilities for recreation and advice to parents. The Centre will be in charge of a trained person who would offer timely help and guidance to the Children in need.

It is proposed to start four Centres one each at Ahmedabad, Poona, Bombay and Hubli. The annual expenditure on account of the new Centres is estimated at Rs. 4,500.

SCHEME No. 392.

Name of the Scheme.—**Award of sholarships for research work into the problems of Juvenile delinquency.**

Recurring ..	Rs.	14,000	Non-recurring ..	Rs.	Nil.
Total ..	„	14,000	Ultimate annual recurring .	„	3,000

Remarks.—In order to encourage research work in respect of problems connected with Juvenile Delinquency it is proposed to award one Research Scholarship of the value of Rs. 125 per mensem to two persons conducting research work in respect of the Juvenile Delinquency under an authorised professor. The grant of scholarship will be subject to the condition that the person remains a full time student. The scholarship would be granted from the year 1956-1957.

OTHER SOCIAL SERVICES

(YOUTH WELFARE)

SCHEME No. 393.

Name of the Scheme.—**Youth Service Camps.**

Recurring .. Rs. Nil. Non-recurring .. Rs. 14,00,000

Total .. „ 14,00,000 Ultimate annual recurring . „ Nil.

Remarks.—The objectives underlying this scheme are :—

(*a*) to develop students into disciplined citizens,

(*b*) to foster in them the love for labour and spirit for the service of the community and the Nation.

It has been suggested by the Government of India that Social Service Camps for both college and school students should be organised, paticularly for those who are in the National Cadet Corps or the Auxiliary Cadet Corps. These Camps are proposed to be organised for Auxiliary Cadet Corps as well as non-Auxiliary Cadet Corps pupils. The strength of each camp is 100 students and five teachers. It is, therefore, proposed to hold 30 such camps in the first year of the Second Five Year Plan, *i.e.*, in 1956-57 and to hold 80 camps in each subsequent year of the Plan. The cost on account of the 30 camps to be organised during 1956-57 works out to Rs. 1,00,000. The total cost on account of the scheme during the Plan period is Rs. 14,00,000 non-recurring. The entitre expenditure on this scheme is likely to be borne by the Government of India.

OTHER SOCIAL SERVICES

(WELFARE OF PHYSICALLY HANDICAPPED)

SCHEME No. 394.

Name of the Scheme.—**Administrative Staff for the Implementation of the Schemes of Education of the Handicapped.**

Recurring .. Rs. 60,000 Non-recurring .. Rs. Nil.

Total .. „ 60,000 Ultimate annual recurring . „ 13,044

Remarks.—Various schemes for the improvement of the educational facilities for the handicapped have been proposed under the Second Five Year Plan. In order to ensure satisfactory implementation of these schemes, it is proposed to appoint the following staff for the administrative and supervisory work in connection with these schemes, *viz.* :—

One Special Officer in Bombay Educational Service (Class I),

One Senior Clerk and

One Junior Clerk.

The recurring cost on account of pay and allowances of the above staff works out to Rs. 60,000.

SCHEMES Nos. 395-397.

Name of the Scheme.—**General measures for the Improvement of the Education of the Handicapped.**

Recurring .. Rs. 82,100 Non-recurring .. Rs. 4,13,770

Total .. „ 4,95,870 or Rs. 5 lakhs in round figures. Ultimate annual recurring . „ 26,016

Remarks.—Some of the existing Government and Non-Government schools for the handicapped have drawn up programmes aiming generally at an increase of 50 per cent. of the existing number of inmates by the end of the Second Five Year Plan. It is proposed to give liberal grants to the non-Government schools for the handicapped at the rate of 66 per cent. of the cost of the schemes, subject to a maximum of Rs. 1,00,000 per institution. The cost on account of the expansion of the Government schools will also have to be fully met by Government. In order to raise the standard of education of the handicapped, it is proposed to award post-school scholarships to handicapped students. The Government of India have a scheme at present by which scholarships are awarded to suitable handicapped students, for prosecuting their studies for higher examinations including the Secondary School Certificate Examination. The expenditure on this account is shared by State and Central Governments on a 50 : 50 basis. It is proposed to provide for the award of Scholarships to 10 students per year during the period of the Second Five Year Plan.

The total cost of the scheme will be :—

	Rs.
(1) Aid to Private Institutions and Extensions of the Government Institutions	3,83,770
(2) Post-school scholarships	30,000
(3) Recurring expenditure due to expansion of Government Institutions	82,100
Total ..	4,95,870

SCHEME No. 398.

Name of the Scheme.—**Sheltered Workshops for the Physically Handicapped.**

Recurring .. Rs. 1,00,000 Non-recurring .. Rs. 3,00,000

Total .. „ 4,00,000 Ultimate annual recurring . „ Nil.

Remarks.—With a view to afford vocational training to handicapped persons such as the blind, deaf, mute and mentally defficient persons it is proposed to give grant in-aid to start sheltered workshops in Bombay. The cost of the scheme is Rs. 4 lakhs out of which Rs. lakh is recurring and Rs. 3 lakh non-recurring.

OTHER SOCIAL SERVICES

(OTHER WELFARE PROGRAMMES)

SCHEME No. 399.

Name of the Scheme.—**Development of Ghayapatwadi and Visapur Lands for Rehabilitation of Beggars.**

Recurring ..	Rs. 50,000	Non-recurring ..	Rs. 1,50,000
Total ..	„ 2,00,000	Ultimate annual recurring .	„ 20,600

Remarks.—Persons arrested under the Bombay Beggars Act and detained in the institutions are provided facilities of craft-training. On their release, however, without finding any out-lets to make use of training received, they fall back to begging as a means of livelihood. Such beggars mostly come from Cochin, Kashmir, Karachi and Assam. Recently experiments have been made to absorb inmates of institutions in employment outside. The main problem however is accommodation for such persons. Government has acquired about 800 acres of land at Visapur and 450 acres of land at Ghayapatwadi. It is proposed to develop these centres during the Second Five Year Plan period so that better ways of employment could be found by settling the beggars on release, on agricultural work side by side with a cottage industry, like weaving, carpentry, tailoring, etc. An amount of Rs. 2,00,000 has been provided for this purpose.

SCIENTIFIC AND INDUSTRIAL RESEARCH ; LANGUAGES, LITERATURE, ARTS AND CULTURE, ALL OTHER ACTIVITIES.

(DEVELOPMENT OF NATIONAL AND REGIONAL LANGUAGES)

SCHEME No. 400.

Name of the Scheme.—**Expansion of the Departments of the Deccan College Post-Graduate and Research Institute, Poona.**

Recurring ..	Rs. 2,49,300	Non-recurring ..	Rs. 50,700
Total ..	„ 3,00,000	Ultimate annual recurring .	„ 49,801

Remarks.—It is proposed to strengthen certain departments of the Deccan College Post-graduate and Research Institute with a view to organising instruction for the M.A. degree in Linguistics and Diploma and M.A. degree courses in Archæology and with a view to undertaking research work in Cultural Anthropology. The staff of the College will also have to be strengthened to enable the College to participate in the Summer and Winter Schools sponsored under the grant received from the Rockefeller Foundation. It is accordingly proposed to create the following additional posts during the Second Five Year Plan period.

One Reader in Indo-Aryan Linguistics in the time scale of Rs. 350—500.

One Reader in Austro-Asiatic Linguistics in the time scale of Rs. 350—500.

One Reader in Ancient Indian History in the time scale of Rs. 350—500.

One Curator of the Archæology Museum in the scale of Rs. 250—400.

One Museum Assistant in the scale of Rs. 75—150.

One Research Assistant in the scale of Rs. 200—300.

It would also be necessary to upgrade the existing post of Reader of Sociology and Anthropology to that of a Professor. The expenditure on account of the additional staff and upgrading of one post of Reader is estimated at Rs. 2,49,300 for five years. A non-recurring expenditure to the extent of Rs. 50,700 is expected to be incurred on the purchase of equipment for laboratory, Archaæological Museum and for preparing plaster casts of unique exhibit etc. A total provision of Rs. 3 lakhs in round figures is, therefore, proposed under the Second Five Year Plan.

SCHEME No. 401.

Name of the Scheme.—**Schemes for the Propagation of Hindi in the Bombay State.**

Recurring ..	Rs.	1,83,828	Non-recurring ..	Rs.	66,000
Total ..	„	2,49,828	Ultimate annual recurring .	„	49,428

Remarks.—In order to propagate the study of Hindi in the Bombay State, it is proposed to take the following measures during the Second Five Year Plan period :—

(1) to institute a Long Term Training Course in each linguistic region for Secondary school teachers where 40 teachers will be trained for 8 months, in order to teach the Higher Secondary standards ;

(2) to continue the present Short Term Training Courses for Hindi teachers in Primary schools by arranging for 2 Short Term courses of 4 months each per annum in each linguistic region, thus training 1,200 primary teachers during the plan period ;

(3) to give grants at the rate of Rs. 500 to 10 selected colleges every year ; to 15 big selected secondary schools every year (enrolment over 500) at the rate of Rs. 200 to give grants to 25 selected small Secondary schools every year (enrolment below 500) at the rate of 100 rupees.

(1) *Training of teachers.*—The requirements of the Long Term and Short Term Courses which will be attached to a Training College in every linguistic region will be (1) 1 Junior Lecturer, (2) 2 Assistant Masters, (3) 1 Clerk and (4) 1 peon as well as contingencies at the rate of Rs. 100 per mensem and provision for library books totalling Rs. 45,500. This will involve a total cost of Rs. 1,83,828 recurring and Rs. 13,500 non-recurring.

(2) *Help to Libraries of Educational Institutions.*—Ten selected colleges, every year are proposed to be paid Rs. 500 which will require Rs. 25,000 during the plan period. Fifteen big secondary schools every year are proposed to be paid Rs. 200 each which will require Rs. 15,000 for the plan period. The entire cost of the proposals will be Rs. 2,49,828 out of which Rs. 1,83,828 will be recurring and the rest non-recurring.

The details of the total cost of the scheme are shown below :—

	Rs.
Ultimate annual recurring expenditure	49,428
Total non-recurring	66,000
Total recurring	1,83,828
Total for five years ..	2,49,828

The Central grant is expected at the rate of 66 per cent. for both non-recurring and recurring items, and the Central grant would work out at Rs. 1,64,886 for the entire scheme..

SCHEME No. 402.

Name of the Scheme.—**Department for the Dictionary of Sanskrit on Historical Principles.**

Recurring	.. Rs.	Nil.	Non-recurring	..	Rs.	2,10,000
Total	.. ,,	2,10,000	Ultimate annual recurring .		,,	Nil.

Remarks.—The work of compiling a Dictionary of Sanskrit on Historical principles has been undertaken under the Government of India's grant of Rs. 5 lakhs spread over a period of ten years from 1951 to 1960. The work has been in progress since 1948 and a great deal of material has accumulated for being arranged in the Scriptorium. With the re-organisation of the Department as suggested by an *Ad-hoc* Committee appointed by the Government of India, the technical staff as also the centres of work for excerpting material for the Dictionary are to be increased. The valuable material thus acquired has to be properly housed in a Scriptorium. For this purpose a fire-proof building and steel furniture are required. It is estimated that about 2,000 filing cabinets consisting of about 64,000 trays will be required for holding the material. Provision has been made in the annual budgets for the required number of cabinets. As the Scriptorium has to be housed in a suitable building it is proposed to construct a fire-proof building for the Scriptorium at an estimated cost of Rs. 2,10,000.

SCIENTIFIC AND INDUSTRIAL RESEARCH ETC.

(ENCOURAGEMENT OF ARTS AND CULTURE)

SCHEME No. 403.

Name of the Scheme.—**Building, Equipment and Maintenance Grants to Research and Cultural Institutions.**

Recurring	.. Rs.	2,00,000	Non-recurring	..	Rs.	2,00,000
Total	.. ,,	4,00,000	Ultimate annual recurring .		,,	40,000

Remarks.—The maintenance grants at present being given to the Research and Cultural Institutions are inadequate. It has not been possible so far to pay any building, equipment or publication grants to these institutions for want of funds. The Research and Cultural institutions in the State are a necessary adjunct to the Universities and Colleges in the field of higher education and research. In this scheme it is proposed to give maintenance grants at the present rate, *i.e.* 22 per cent. of the admissible expenditure on recurring items, to recognised research and cultural institutions, *i.e.*, those already recognised and those which may be given recognition during the Second Five Year Plan period. It is also proposed to pay non-recurring building, equipment and publication grants to these institutions to the extent of Rs. 2 lakhs during the Second Five Year Plan period.

SCHEME No. 404.

Name of the Scheme.—**Creation of a Department of Archaeology.**

Recurring	.. Rs.	80,000	Non-recurring	..	Rs.	Nil.
Total	.. ,,	80,000	Ultimate annual recurring .		,,	18,000

Remarks.—The Central Advisory Board of Archaeology had recommended that the State Government should appoint properly qualified staff for taking care of monuments and ancient sites left in its charge and also for further exploration of the antiquities within the boundaries of each State. The subject Archaeology has been partially decentralised under the Constitution of India and in view of entry 12 under list II—State list—in the Seventh Schedule thereof, the responsibility of protecting ancient and historical monuments other than those declared by Parliament by law to be of national importance lying within the boundaries of a State vests in the State Government and it is, therefore, necessary to set up a machinery for the proper maintenance of the monuments lying within the State. At present there is no machinery to look after these monuments and historical places. In the circumstances it is necessary to create a separate full-fledged Department of Archaeology. A beginning has been made in this direction during the year 1955-56 by starting a nucleus Department of Archaeology. The nucleus Department will, however, have to be developed into a full-fledged Department of Archaeology during the Second Plan period for which a minimum provision of Rs. 80,000 has been made in the Plan.

SCIENTIFIC AND INDUSTRIAL RESEARCH ETC.

(PUBLICITY AND PROPAGANDA)

SCHEME No. 405.

Name of the Scheme.—**Expansion of Rural Broadcasting Scheme.**

Recurring	.. Rs.	8,36,000	Non-recurring	.. Rs.	2,64,000
Total	.. ,,	11,00,000	Ultimate annual recurring .	,,	1,67,000

Remarks.—Towards the end of 1955-1956 there were 851 radio sets operating in the State under the Rural Broadcasting Scheme. These sets were supplied by the Government of India under the subsidy scheme. During the Second Five Year Plan period (1956 to 1961) a further additional 880 radio sets are intended to be installed. Of these, 224 sets will be installed in 1956-57 and the remaining sets will be installed in subsequent years. The total cost of this scheme is Rs. 11 lakhs (Rs. 2·64 lakhs non-recurring and Rs. 8·36 lakhs recurring).

The total Central aid under this scheme would be Rs. 6·49 lakhs.

SCHEME No. 406.

Name of the Scheme.—**Feature Publicity.**

Recurring	.. Rs.	70,000	Non-recurring	.. Rs.	Nil.
Total	.. ,,	70,000	Ultimate annual recurring	,,	14,000

Remarks.—Generally items requiring publicity are received from various Departments of Government. It often happens that certain items deserving fuller and better publicity, especially those pertaining to latest developments or human interest, go unnoticed for want of effective liaisoning between the Sachivalaya Departments and the Directorate and also between various departments like Projects Administration in District, Director of Agriculture, Director of Education, the Inspector General of Police, etc. Some of these departments have been pressing for such liaison as a lot of useful work done by them for the people remains unnoticed and people not able to take advantage of the same. At the instance of the Agricultural Information Committee for the Bombay State, a scheme for establishing an Agricultural Information Section was worked out. Besides, there are certain other items which need follow up publicity after the first announcement. It is, therefore, proposed to appoint two officers to be known as Departmental Liaison Officers for this purpose in the scale of Rs. 450—20—650. The officers will maintain close liaison with Ministers and officers of the Departments in their charge, go through files and other papers, visit the projects whenever necessary and fish out material requiring publicity and prepare special articles and other items for release to the press and also for publication in the publications issued by the Directorate. They will also prepare radio and other speeches and cover engagements of Ministers and functions sponsored by Government. Two peons in the scale of Rs. 35—$\frac{1}{2}$—40 are also required.

SCHEME No. 407.

Name of the Scheme.—**Printed and Pictorial Publicity.**

Recurring	..	Rs. 6,57,500	Non-recurring	..	Rs.	Nil.
Total	..	„ 6,57,500	Ultimate annual recurring		„	1,31,500

Remarks.—(*a*) *Books and Pamphlets.*—This scheme envisages publicising the achievements of the First Five Year Plan and the contents of the Second Five Year Plan. To start with it is proposed to issue the following publications :—

(1) What the First Five Year Plan, Bombay, has done for the people of this State (in English, Marathi, Gujarati and Kannada).

(2) Second Five Year Plan, Bombay—Complete Text (in English, Marathi, Gujarati, Kannada and Hindi).

(3) Popular edition of the Second Five Year Plan for Bombay State (in English, Marathi, Gujarati, Kannada and Hindi).

(4) Questions and answers on the Second Five Year Plan (in English, Marathi, Gujarati, Kannada and Hindi).

(5) Second Five Year Plan for Districts (28 pamphlets—in English and regional languages).

(6) Taluka-wise breakup pamphlets in regional languages concerned (about 300 pamphlets in all).

(7) Subjectwise breakup (in English, Marathi, Gujarati, Kannada and Hindi).

The cost of the publications mentioned at 1, 2 and 4 will be met from the norma grants of the Directorate. For the remaining publications an additional grant of Rs. 1,25,000 will be necessary.

It is necessary to bring out regional language editions of the popular and abridged versions of the All-India Plan as was done in the case of the First Five Year Plan. This work will be undertaken provided the full expenditure on this account is met by the Central Government.

It is proposed to price these publications at 50 per cent. of the cost of printing. Of these publications, some copies will have to be given free to newspapers, officers and such other institutions which may be decided upon. The rest of the copies will be sold. Thus, taking into account 50 per cent. loss by way of subsidy and 25 per cent. loss by way of free distribution of copies, it is expected to realise 25 per cent. of the total amount, namely, Rs. 45,000. The other items like posters, slides, photo series cannot be sold and so also nothing could be recovered out of the amount provided for packing, service postage, etc. The net monetary loss on account of printing etc. of publications will thus be Rs. 1,30,000 (Rs. 1,75,000 total cost minus Rs. 45,000 realisation of sale proceeds publications).

Besides advertisements relating to the Second Five Year Plan will be published in the State newspapers and periodicals. Such announcements through the Press are the sure and quick means of reaching the masses.

(*b*) *Poster Publicity.*—Eight posters and eight charts giving an idea of achievements in the First Five Year Plan and proposed activities during the Second Five Year Plan subject-wise will be issued. Six charts and posters giving an overall picture of the Second Five Year Plan will be necessary. This work will be completed before the end of the year 1956-57.

(*c*) *Pictorial Publicity.*—Slides, brochures and photo series about the achievements of the First Five Year Plan and the progress of the Second Five Year Plan projects will be undertaken. For this purpose a sum of Rs. 75,000 will be required for the Plan period.

To cope with the above and the other schemes of publicity it will be necessary to create some additional temporary posts in the Directorate for a period of two years (1956-57 and 1957-58). Posts of a Public Relations Officer and of three assistants to him have already been sanctioned but the magnitude of the work is so much that they will hardly be able to do even 25 per cent. of it. Besides they have other duties to perform. Therefore, if the work is to be completed according to the schedule the new posts required will be as under :—

Gazetted—

One Production Officer (Rs. 500—30—800).

One Accounts Officers (Rs. 450—20—650).

One Assistant Directors of Publicity—Hindi (Rs. 280—550).

Non-Gazetted—

Five Senior Sub-Editors—One each for English, Marathi, Gujarati, Kannada and Hindi (Rs. 250—15—400).

Five Language Assistants—One each for English, Marathi, Gujarati, Kannada and Hindi (Rs. 120—10—250).

Two Proof Readers—English (Rs. 120—10—250).

One Stenographer (Rs. 140—8—220—10—270).

Four Language Typists—One each for Marathi, Gujarati, Kannada and Hindi (Rs. 75—220).

One Despatch Officer (Rs. 250—15—400).

One Superintendent (Rs. 200—15—380).

Three Senior Clerks (Inclusive of the clerk in charge of blocks, etc.) (Rs. 120—10—250).

Four Junior Clerks (Rs. 75—220).

One Head Packer (Rs. 50—3—80).

Eight Packers (Rs. 35—½—40).

The functions of the most of the staff proposed above are self-explanatory from their designations.

With the increase in the output in the publicity releases and other publications, there will be a corresponding increase in the service postage, packing and other charges connected with the despatch of the material. A provision of Rs. 55,000 i.e. Rs. 45,000 on account of service postage and Rs. 10,000 for packing and other incidental charges, has therefore, been made for this purpose.

SCHEME No. 408.

Name of the Scheme.—**Information Centres.**

Recurring	.. Rs.	5,17,950	Non-recurring	.. Rs.	9,500
Total	.. ,,	5,27,450	Ultimate annual recurring.	,,	1,03,590

Remarks.—The conference of Directors of Information held at New Delhi in January 1955 recommended the establishment of information centres for disseminating the information and cognate matters to the public at the State and district headquarters. Accordingly it is proposed to establish 27 information centres, one in each district in the State at the rate of 6 centres during the year 1956-57 and the remaining 21 in subsequent years. The expenditure on the proposed centres is phased as under :—

	1956-57	1957-58	1958-59	1959-60	1960-61
	Rs.	Rs.	Rs.	Rs.	Rs.
Recurring	31,600	90,229	1,17,227	1,20,227	1,24,487
Non-recurring	18,400	11,450	4,610	4,610	4,610
Total ..	50,000	1,01,679	1,21,837	1,24,837	1,29,097

SCHEME No. 409.

Name of the Scheme.—**Programme of Exhibitions.**

Recurring	.. Rs.	50,000	Non-recurring	.. Rs.	1,00,000
Total	.. ,,	1,50,000	Ultimate annual recurring	,,	10,000

Remarks.—It is proposed to build up a full-fledged exhibition unit under this programme. The unit will be in charge of an Exhibition Officer and will have four copies of each model, chart and other equipment to be prepared for the unit. This equipment will be used for the purpose of all-India exhibitions as well as in bigger exhibitions in the State.

Under this scheme, it is also proposed to equip the mobile publicity vans of the State in the various districts with a small exhibition unit consisting of selected models, charts, etc.

The cost of the scheme is estimated to be Rs. 1,50,000 phased as under :—

	1956–57	1957–58	1958–59	1959–60	1960–61
Central Units	Rs.	Rs.	Rs.	Rs.	Rs.
Non-recurring (Models and Equipment)	20,000	30,000	12,500	Nil.	Nil.
Recurring (Additions and Replacement)	3,000	5,000	5,000	11,000	5,000
Van Units					
Non-recurring (Models and Equipment)	7,000	18,000	12,500	Nil.	Nil.
Recurring (Additional and Replacement)	2,000	3,000	5,000	7,000	4,000
Grand Total—Rs. 1,50,000.					

SCHEME No. 410.

Name of the Scheme.—**Tours of Journalists.**

Recurring	..	Rs.	70,000	Non-recurring	.. Rs.	Nil.
Total	..	„	70,000	Ultimate annual recurring.	„	14,000

Remarks.—It is proposed to disseminate knowledge of the various activities launched under the Five Year Plan by organising tours of journalists to important projects. The tours will be organised in two batches one of editors and another of reporters. The scheme would cost about Rs. 14,000 per year.

SCHEME No. 411.

Name of the Scheme.—**Films Publicity.**

Recurring	..	Rs.	1,25,000	Non-recurring	.. Rs.	Nil.
Total	..	„	1,25,000	Ultimate annual recurring .	„	25,000

Remarks.—The Directorate of Publicity makes every year 12 news-reels and about 8 documentaries. The normal programme of the Directorate will be continued. In addition to that it is intended to produce half a dozen more documentaries and a screen version of the programme for each district. It is proposed to produce some six new films during the Plan period dealing exclusively with the development programme at a total cost of Rs. 1,25,000.

SCHEME No. 412.

Name of the Scheme.—**Publicity through Recreational Activities.**

Recurring	..	Rs.	1,50,000	Non-recurring	.. Rs.	Nil.
Total	..	„	1,50,000	Ultimate annual recurring .	„	25,000

Remarks.—(*a*) At present grants are being given to dramatic institutions in various districts for the encouragement of dramas. However, there are no suitable dramas, songs and other material of any basic value which refer to Government activities. It is, therefore, proposed to get such dramas and other material written and distributed either free of cost or at a nominal cost to the various dramatic institutions in the State, various schools and colleges and to dramatic clubs.

(*b*) It is proposed to utilise the folk arts like Kirtankars, tamashas, the Ras and other popular agencies for the propagation of basic values and Government activities.

(*c*) It is also proposed to have a scheme for revival of cultural activities in selected community project areas. A suitable institution will be entrusted with this work of research into the folk songs and other cultural activities prevailing in the areas. The institution will also train local talent and revive the old folk arts which are otherwise on the verge of extinction. The staff required for the scheme will be as follows :—

One Recreation Officer in the scale of Rs. 450—20—650.
One Accountant (Rs. 170—10—270).
One Peon (Rs. 35—½—40).

This provision is exclusive of the provision made for similar activities under the Community Development Projects.

SCHEME No. 413.

Name of the Scheme.—**Establishment of a Workshop for Repairs to Projectors, Generators, etc.**

Recurring ..	Rs.	80,000	Non-recurring ..	Rs.	20,000
Total ..	„	1,00,000	Ultimate annual recurring .	„	16,000

Remarks.—There are already 30 mobile publicity vans each equipped with a power generator, a film projector, gramophone, loud speaker and other ancillary equipment. A considerable amount is spent annually on repairs and upkeep of the projectors, generators and other cine equipment. At present we are spending about Rs. 25,000 every year on the repairs of this machinery and yet the results are very unsatisfactory. There is also a lot of delay in the execution of repair work. It is, therefore, proposed to set up a small workshop for this purpose. The initial capital cost for equipment is expected to be Rs. 20,000 which amount requires to be provided. The recurring cost year to year will be met from the normal grants of the Directorate of Publicity as a result of the savings on the repair charges. The workshop will also provide facilities for repairs to the equipments of the Government of India vans in the Bombay State.

It is expected that an average of about 5 projectors would come to the workshop every month for complete overhaul and another 5 to 6 projectors may come for minor repairs every month. The expenditure on equipment, staff an other items for the proposed workshop on this basis would be :—

Capital expenditure :—	Rs.
(i) Workshop—equipment such as Audio Oscillator, Multimeters, Channalists, valve Testers, Condenser Testers, Meggar, etc.	20,000

Recurring Expenditure :— Rs.

(ii) Pay of Estabiishment—Staff consisting of one Assistant Engineer, a few technicians, Mechanics, Operators, Store-keeper, clerk-typist, peons, etc. 16,000

Total .. 36,000

SCHEME No. 414.

Name of the Scheme.—**Publicity through Mobile Publicity Vans.**

Recurring	.. Rs.	5,70,000	Non-recurring	..	Rs.	1,80,000
Total	.. „	7,50,000	Ultimate annual recurring .		„	1,14,000

Remarks.—Mobile Publicity Vans are perhaps the most potent means whereby the Directorate of Publicity can have direct contact with the masses. There is at present one such van in each district. Taking the average number of villages accessible to the van to be 500 in each district and the number of villages covered in a month as 20, it is hardly able to cover all villages every two years. For the effective working of the scheme, the van should be able to visit each village within its range at least once or twice a month including the existing vans, three vans for each district should be a reasonable number. Some of the bigger districts like Surat and Thana have already pressed for an additional van. It is, therefore, proposed to add six new vans during the Plan period for work in bigger districts of the State. The cost per van including the equipment (Generator, Projectors, etc.) would be Rs. 30,000 and for 6 vans Rs. 1,80,000.

Addition of six vans implies addition of the crew necessary for manning it. This crew consists of a District Publicity Officer, a film-projector operator, a driver and a cleaner. The expansion also entails provision of supervisory and clerical staff at the Headquarters of the Directorate in Bombay. Provision has, therefore, been made for six District Publicity Officers in the scale of Rs. 150—10—220 and corresponding number of film-projector operators, drivers and cleaners. The pay and allowances of the District Publicity Officers as well as the remaining crew of the vans are of the mofussil scale.

With the expansion of district units, in the direction of vans as also of introduction of additional schemes such as Information Centres, Exhibition programme, organisation of tours of journalists and appointment of mofussil correspondents, work in the Directorate's headquarters in Bombay will also expand in several directions such as stores purchase, accounts and correspondence, supervision, etc. Provision has, therefore, been made in the estimates for the entertainment of the following additional staff :—

One Rural Publicity Organiser (Rs. 450—20—650).

One Assistant Director of Publicity (Vans) (Rs. 200—15—400—20—500—25—550).

One Personal Assistant to the Director of Publicity (Rs. 250—15—400).
One Superintendent Rs. 200—15—380.
One Assistant Superintendent Rs. 170—10—270.
One Accountant Rs. 170—10—270.
Two Senior Clerks Rs. 120—10—220—E.B.—10—250 each.
Two Clerks Rs. 75—5—140—E.B.—8—220—each.
One Store Keeper Rs. 120—10—200—E.B.—10—250.
Two Typists Rs. 75—5—140—E.B.—8—220 each.
Four Peons Rs. 35—½—40 each.

SCHEME No. 415.

Name of the Scheme.—**Appointment of Mofussil Correspondents.**

Recurring	.. Rs.	50,000	Non-recurring	.. Rs.	*Nil.*
Total	.. „	50,000	Ultimate annual recurring	„	10,000

Remarks.—At present the Directorate of Publicity has no direct contacts with either the officers or the public below the district level. It is proposed to utilise the agencies of Social Education Organisers in the Community Development Projects and National Extension Service areas for this purpose. They will send reports of important happenings in the districts and undertake distribution and sale of publicity materials. They will also help in assessing the effects of publicity and in raising subscriptions to the Government publications. A token remuneration of Rs. 10 per mensem is proposed to be given to them. It is proposed to spend Rs. 10,000 every year on the scheme.

SCIENTIFIC AND INDUSTRIAL RESEARCH ETC.

(MISCELLANEOUS)

SCHEME No. 416.

Name of the Scheme.—**Statistics relating to Planning—Planning Unit.**

Recurring	.. Rs.	1,98,520	Non-recurring	.. Rs.	2,000
Total	.. „	2,00,520	Ultimate annual recurring	„	42,000

Remarks.—In connection with the Second Five-Year Plan, the establishment of a Planning Unit in the Bureau of Economics and Statistics, Government of Bombay, Bombay has been recommended by the Government of India. The duties of the Unit will be to obtain and analyse the necessary statistical information to assess the progress of the Five-Year Plan and to make special studies in connection with various aspects of the Plan. It will also have to re-assess and reformulate continually targets, projects and policies to suit changing needs and conditions. The Bureau will have to serve as a focal centre in a continual two-way flow of information required for planning. It is accordingly proposed to establish a Planning Unit in the Bureau during the Second Five-Year Plan period at an estimated cost of Rs. 2,00,520, out of which 50 per cent. is expected to be received from the Government of India.

SCHEME No. 417.

Name of the Scheme.—**Statistics relating to Planning—District Statistical Organisation.**

Recurring	.. Rs.	3,79,750	Non-recurring	Rs.	20,250
Total	.. „	4,00,000	Ultimate annual recurring	„	75,950

Remarks.—The Government collects a vast amount of data either as incidental to the administration or for some special needs. It also carries out through its various statistical agencies a large number of sample surveys to obtain information of specific points regarding economic and social wellbeing of the population. All this information is to be obtained from the villages. Since the most of the data collected is obtained as subsidiary of administration, no single officer in the district is considered responsible for collection of the data. This has resulted in the data being haphazard. There is also considerable delay involved in collection of the data.

2. For helping all agencies concerned in the district in furnishing correct and up-to-date statistical returns to the State, the Joint Conference of Central and State Statisticians recommended in 1953, the appointment of one District Statistical Officer for each District. This recommendation has also been stressed by the Agricultural Prices Enquiry Committee.

It will also be necessary to check continually Plan targets from the top against possibilities of realisation at the place of projects and to collect information of many kinds that will be required for the formulation and revision of the plan as well as to assess the progress and implementation of the plan. Suitable machinery is, therefore, necessary for improving the existing Statistics in all fields and for collecting all the basic statistics required in connection with proper planning and for supervising the various surveys that may be carried out in the district during the Second Five-Year Plan period.

It is, therefore, proposed to make a beginning in the Second Plan period by appointing about 13 District Statistical Officers except in the districts of Bombay City and Dangs, the ultimate objective being to have one District Statistical Officer in each District. It is, accordingly proposed to appoint only 3 District Statistical Officers during 1956-57 and to expand the organisation gradually to cover other Districts. There are already five Statistical Officers, created during 1955-56 for the National Sample Survey. These posts are proposed to be continued for 5 years from 1956-57 and will be utilised as District Statistical Officers. The Government of India would have to bear 50 per cent. of the total cost of the scheme.

SCHEME No. 418.

Name of the Scheme.—**Revision of the Bombay District Gazetteers.**

Recurring	.. Rs.	2,00,000	Non-recurring	.. Rs.	1,44,000
Total	.. „	3,44,000	Ultimate annual recurring	„	40,000

Remarks.—The Government of Bombay has taken in hand the work of revising the old Gazetteers of the Bombay State and has set up an independent Editorial Board with the Chief Secretary to Government as its ex-officio Chairman, and a full time Executive Editor who also works as its Secretary. The Editorial Board was appointed in 1949.

The revised Gazetteers consist of a General series and a District series. In the former series it is proposed to publish six volumes, dealing with (1) Physical Features, (2) People and their Culture, (3) History, (4) Languages and Literature, (5) Botany and (6) Public Administration. The District series will comprise 28 volumes, one for each district.

So far the Botany volume Parts I and II from the General Series and the Poona volume from the District Series have been published. The Dharwar volume is at present under print. Work on four volumes in General series and 3 volumes in the District series is in progress. This Government has been spending nearly Rs. 50,000 per annum on account of the staff, etc. engaged for this work.

It is proposed to accelerate the work of the revision of the Gazetteers so as to complete them within a reasonable period. A major part of the work will have to be completed before the end of the Second Five-Year Plan period. For this purpose the Research and other staff will have to be strengthened. It is estimated that the total additional expenditure on account of the additional Research and other staff required for the work including the cost of printing of the volumes would be Rs. 3,44,000 during the Second Five-Year Plan period as shown below :—

	Rs.
Recurring	
Research and office staff	1,15,000
Allowances and Honoraria	75,000
Contingencies	10,000
Total Recurring ..	2,00,000
Non-Recurring	Rs.
Cost of printing the Volumes	1,44,000
Total Recurring and Non-recurring ..	3,44,000

This expenditure will be in addition to the expenditure of about Rs. 2,50,000 on account of continuance of the existing Research and other staff.

The Government of India would bear 50 per cent. of the total expenditure on account of the scheme.

SCHEME No. 419.

Name of the Scheme.—**Miscellaneous Schemes received from District Development Boards.**

Recurring	.. Rs.	*	Non-recurring	.. Rs.	*
Total	..	„ 1,00,00,000	Ultimate annual recurring.	„	*

*Details are not available.

Remarks.—Proposals for the Second Five-Year Plan were called for and received from the various District Development Boards in addition to the Heads of Departments dealing with developmental activities. The schemes and projects prepared by the Heads of Departments on a statewide basis, and included in the Plan would cover most of the proposals forwarded by the District Development Boards. There are, however, some schemes suggested by the District Development Boards which, though of a local character, are of importance and which are not covered by the specific schemes included in the Plan. A lump provision of Rs. 1 crore is, therefore, made in the Plan to meet the requirements of those schemes. As the details of the schemes have yet to be examined the recurring and non-recurring expenditure cannot be estimated at this stage.

SCHEME No. 420.

Name of the Scheme.—**Development Schemes proposed by Municipal Corporations, Borough and District Municipalities.**

Recurring .. Rs. 2,25,00,000 Non-recurring .. Rs. 4,56,75,000 (loan).

Total .. „ 6,81,75,000 Ultimate annual recurring. „ *Nil.*

Remarks.—Proposals for the Second Five-Year Plan were invited from the Municipal Corporations and the Borough and District Municipalities in the State. The total value of the plans forwarded by the various local bodies is of the order of Rs. 103·58 crores. Some of the schemes are, however, covered by the general schemes proposed under different heads of development, *viz.* village water supply and drainage, roads, education, slaughter houses and markets, slum clearance, etc. The cost of other proposals from the local bodies works out to Rs. 27·64 crores. These include schemes relating to slum clearance, medical facilities, parks and gardens, implementation of Master Plans, other public health measures and administrative schemes. The details of many of these schemes have to be worked out. In some cases the local bodies themselves might be able to find funds from their own resources. An *ad hoc* provision of Rs. 6,81,75,000 is, therefore, made for grant of subsidies and loans to the Local Bodies for such types of schemes as are not covered by the general schemes under which provision for assistance to local bodies is being made separately.

SCHEME No. 421. (This scheme has been shown after scheme No. 385 and before scheme No. 386.)

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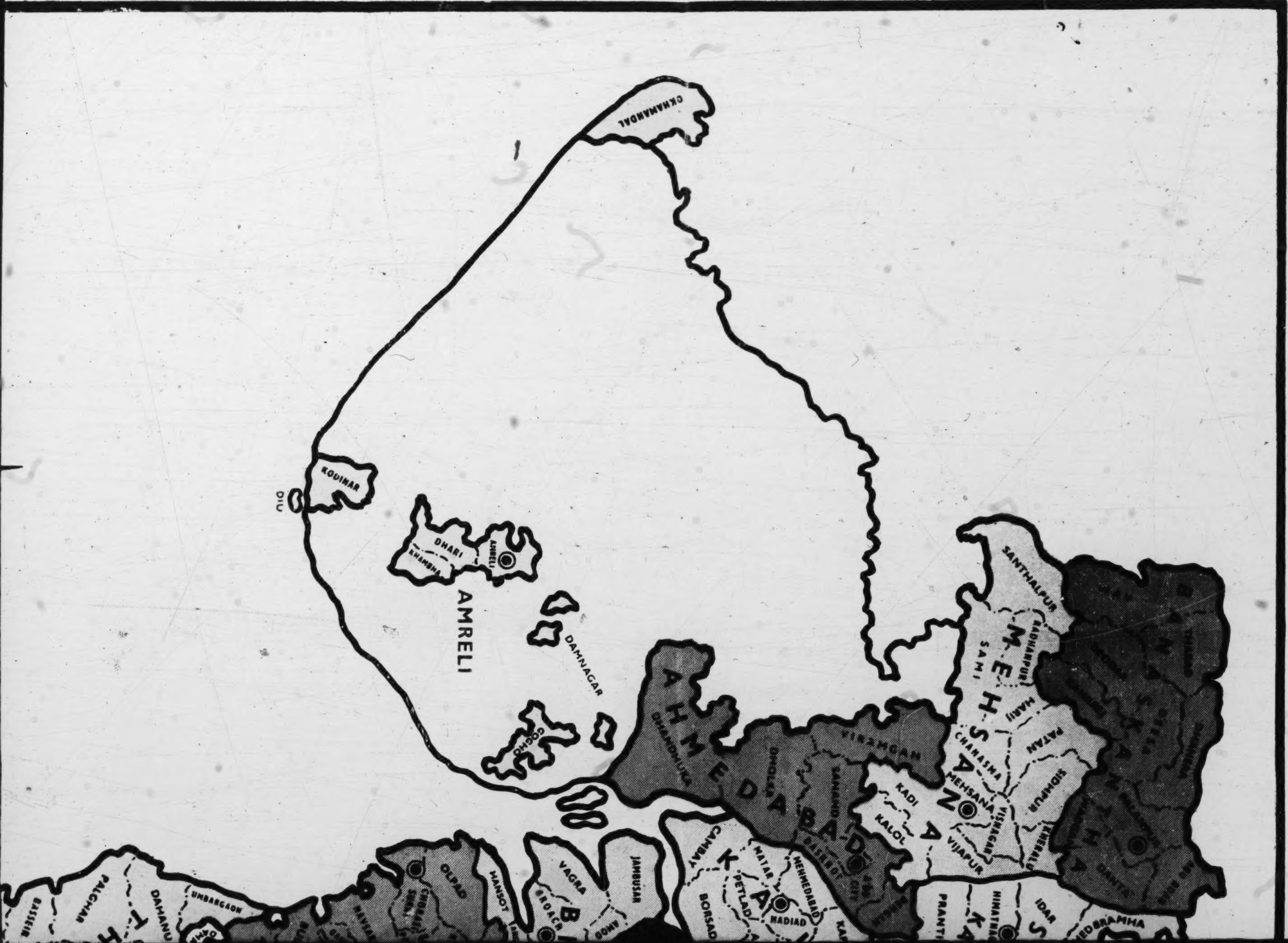
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VIRAMGAM
DASKROI
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SANTHALPUR
RADHANPUR
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CHANASMA
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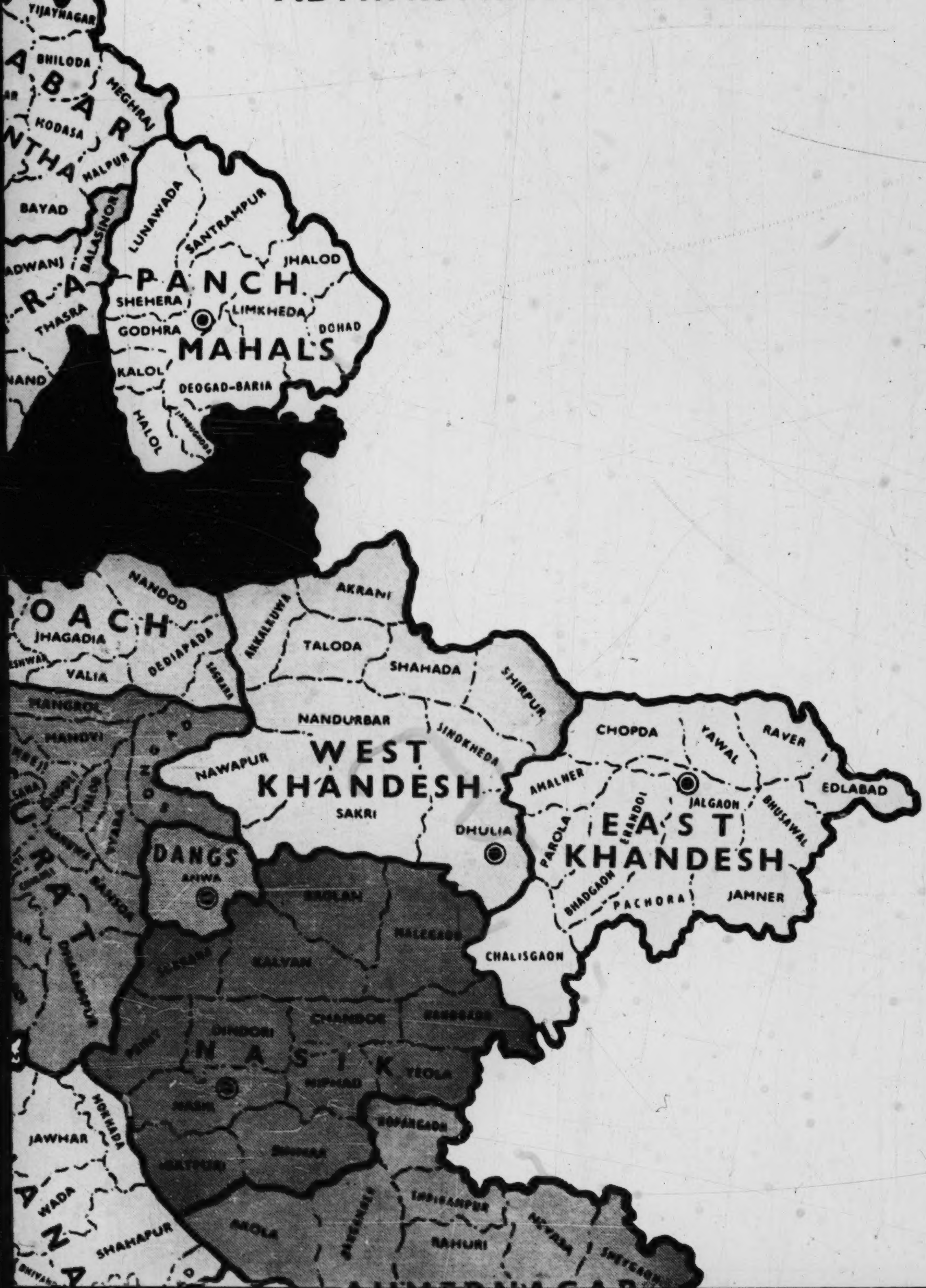
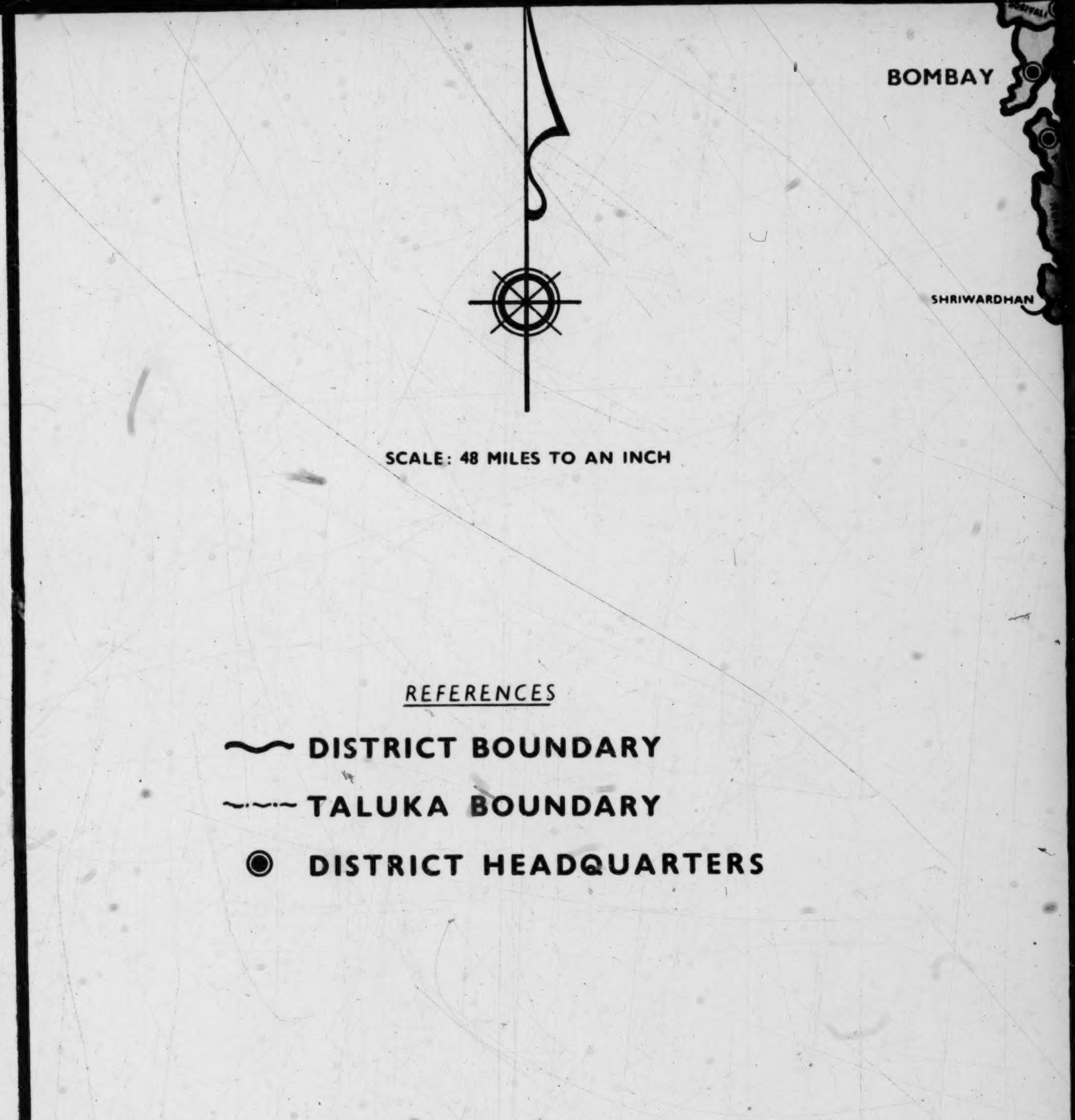
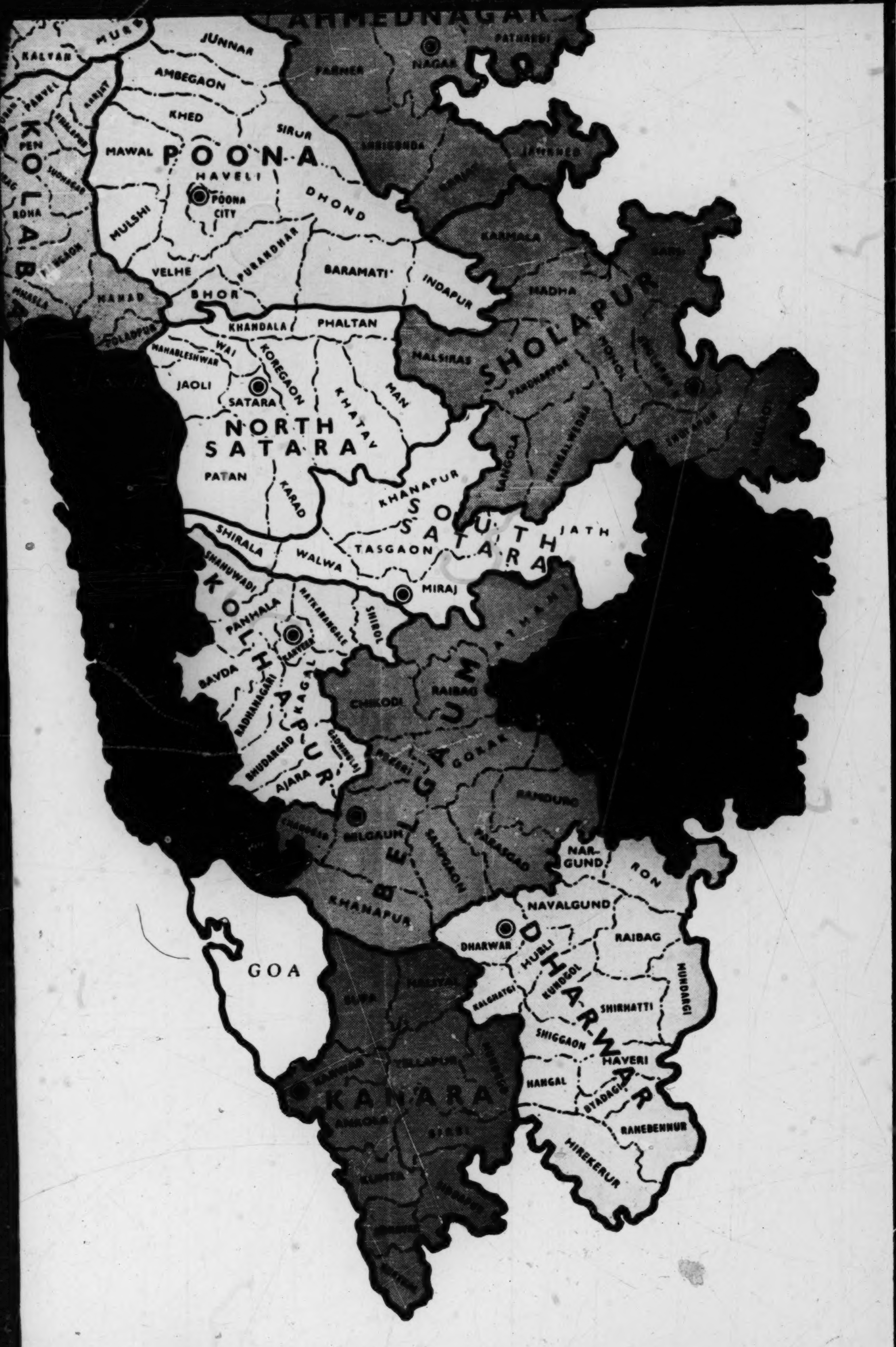
BOMBAY STATE

ADMINISTRATIVE DIVISIONS




BOMBAY
SHRIWARDHAN
SCALE: 48 MILES TO AN INCH
REFERENCES
DISTRICT BOUNDARY
TALUKA BOUNDARY
DISTRICT HEADQUARTERS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KUMTA
SIDDAPUR